DOCUMENT RESUME

ED 086 880 CE 000 917

AUTHOR	Mapp, Patricia
TITLE	Women in Apprenticeship--Why Not? Final Report.
INSTITUTION	Wisconsin State Dept. of Industry, Labor and Human Relations, Madison.
SPONS AGENCY	Manpower Administration (DOL), Washington, D.C. Office of Research and Development.
REPORT NO	DLMA-92-53-70-17-01
PUB DATE	Aug 73
NOTE	268p.
AVAILABLE FROM	National Technical Information Service Springfield, Va. 22151
EDRS PRICE	MF-$0.65 HC-$9.87
DESCRIPTORS	*Apprenticeships; Attendant Training; Child Care Occupations; *Employer Attitudes; *Equal Opportunities (Jobs); Feminism; Government Role; Health Occupations Education; Nondiscriminatory Education; *Sex Discrimination; Skilled Workers; Surveys; Trade and Industrial Education; Vocational Counseling; Vocational Interests; *Working Women

ABSTRACT

The project goals were to isolate, analyze and minimize barriers to the participation of women in the skilled trades. Brochures and a film aimed at dispelling myths were produced. Employer surveys confirmed that prejudice and ignorance of laws had to be confronted with facts. Surveys of women apprentices and their employers showed a low drop-out rate and high degree of employer satisfaction. Changes were indicated in State Employment and Apprenticeship agencies to eliminate sex-stereotyping and new apprenciceship programs were begun in day care and health occupations. Recommendations: (1) sponsorship of apprenticeship "out-reach" function for women; (2) active enforcement of equal opportunity laws; (3) reassessment of so-called "women's jobs" codes in Dictionary of Occupational Titles; (4) schools opening technical pre-apprenticeship classes to girls; and, (5) unions/employers waiving collective bargaining agreements as they exclude women from apprenticeship application. Forty pages of appendixes include survey forms, questionnaires, and brochures. (Author/AJ)

ED 086880

WOMEN IN APPRENTICESHIP

WISCONSIN'S APPRENTICESHIP SYSTEM
SINCE 1911
GEARED TO PROGRESS

WHY NOT?

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED 086880

WOMEN IN APPRENTICESHIP -- WHY NOT?

JULY 1, 1970 - JUNE 30, 1973

FINAL REPORT

This report was prepared for the Manpower Administration, U.S. Department of Labor, under research and development contract (grant) No. 92-53-70-17. Since contractors (grantees) conducting research and development projects under Government sponsorship are encouraged to express their own judgement freely, this report does not necessarily represent the official opinion or policy of the Department of Labor. The contractor (grantee) is solely responsible for the contents of this report.

REPORT SUBMITTED BY
PATRICIA MAPP
August 1973

STATE OF WISCONSIN
Department of Industry, Labor and Human Relations
Division of Apprenticeship and Training
P. O. Box 2209
Madison, Wisconsin 53701

DATA

1. DLMA 92-53-70-17-01

2.

3. Recipient's Accession No.

5. Report Date: August, 1973

Women in Apprenticeship -- Why Not?

6.

Patricia Mapp

8. Performing Organization Rept. No.

Performing Organization Name and Address

Department of Industry, Labor and Human Relations
Wisconsin Division of Apprenticeship and Training
Box 2209
Madison, Wisconsin 53705

10. Project/Task/Work Unit No.

11. Contract/Grant No.: DL 92-53-70-17

Sponsoring Organization Name and Address

U.S. Department of Labor
Manpower Administration
Office of Research and Development
1111 20th St., N.W., Washington, D. C. 20210

13. Type of Report & Period Covered: 7/1/70 - 6/30/73

14.

15. Supplementary Notes

Project jointly sponsored by Wisconsin Division of Apprenticeship and Training and by the University of Wisconsin Extension.

Goals: to isolate, analyze and minimize barriers to the participation of women in the skilled trades. Brochures and a film, aimed at dispelling traditional "women in employment" myths were produced. Employer surveys confirmed that ignorance of equal opportunity laws, and prejudices had to be confronted with facts. Surveys of women apprentices and their employers showed a low female drop-out rate (half that of males) and high degree of employer satisfaction. Changes were initiated in State Employment and Apprenticeship Agencies to eliminate sex-stereotyping. New apprenticeship programs were begun in day care and health occupations.

Recommendations: a) sponsorship of apprenticeship "out-reach" function for women; b) active enforcement of equal opportunity laws; c) reassessment of so called "women's jobs" codes in Dictionary of Occupational Titles; d) schools opening technical pre-apprenticeship classes to girls; and, e) unions/employers waiving collective bargaining agreements as they exclude women from apprenticeship application.

17. Key Words and Document Analysis. 17a. Descriptors

Apprenticeship, counseling-vocational interests, education (includes training), employment, females, government policies, industrial training, management training, labor unions, manpower utilization, skilled workers, surveys, upgrading.

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group 5I

18. Availability Statement: Distribution is unlimited. Available from National Technical Information Service, Springfield, Va. 22151.

19. Security Class (This Report) UNCLASSIFIED

20. Security Class (This Page) UNCLASSIFIED

21. No. of Pages

22. Price

THIS FORM MAY BE REPRODUCED

MESSAGE FROM THE WISCONSIN DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS

True to its historic, progressive tradition, Wisconsin, in 1961, enacted the first American law prohibiting discrimination in employment based on sex. During the subsequent decade, many efforts have manifested our state's commitment to equal employment opportunity for all. High among these has been this project, Women in Apprenticeship. We sincerely hope the findings and recommendations of this three-year study will be of benefit to the other states and to the United States Labor Department. Whatever in-kind contributions and follow-up activity our department has put into this endeavor have been more than repaid in statewide awareness and results.

Special thanks for their insight and relentless efforts to educate our Commission and others in the state are due Department of Industry, Labor and Human Relations employees Charles T. Nye, Apprenticeship and Training Division Administrator; Norma Briggs, Project Coordinator (1970-72) and now Director of the Bureau of Community Services, Equal Rights Division; Patricia Mapp, Project Coordinator and the author of this report; and Dr. Kathryn F. Clarenbach, Professor of Political Science, University of Wisconsin Extension and Chairperson of the Governor's Commission on the Status of Women. We are proud of their representation of Wisconsin through this project.

Philip E Lerman

Philip E. Lerman, Chairman
Department of Industry, Labor
and Human Relations

ACKNOWLEDGEMENTS

The preparation of the Final Report, the completion of numerous surveys, and the actual field work on behalf of women apprentices have made special demands on both the field and secretarial staffs of the Division of Apprenticeship and Training. Without their willingness to share their technical skills, knowledge of apprenticeship and salty, good-natured wit and wisdom, the Project goals could not have been approached.

Mary Bach, Project Field Representative in the Target Area, and Dorothy Torres in the Milwaukee District, by their presence on the staff, and by their direct work among employers and women, especially in stabilizing new apprenticeships in the Day Care and Health Occupations, contributed heavily to our common goal.

And, although each has moved in and out of specific "Women in Apprenticeship" assignments during the past three years, Karen Vande Loo, Mary Bruns, Joyce Partowmah, and Kristen Penn, in the Madison central office, lent attention to detail, ingenuity, and cooperation to the promotion and communication aspects of the project -- including showing the project film in high schools, compiling survey data, and typing quarterly and final reports.

I have been grateful for the cooperation of each person and extend warm thanks to the Division for its help and hospitality.

Patricia Mapp, Coordinator
Women in Apprenticeship Project
(1972-1973)

TABLE OF CONTENTS

Page

BIBLIOGRAPHIC DATA SHEET ii

MESSAGE FROM THE WISCONSIN DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS. iii

ACKNOWLEDGEMENTS iv

TABLE OF CONTENTS. v

LIST OF TABLES xi

LIST OF ABBREVIATIONS. xv

PREFACE. xvii

CHAPTER 1: PROJECT OVERVIEW 3

- Why Apprenticeship? 4
- Why Women?. 9
  - Reality and Myth 9
  - "Women's Work:" The Dictionary of Occupational Titles. 11
- What Was Done 13
  - Public Education 13
  - Surveys. 14
  - Background Studies 15
  - Changes Made 17
    - Apprenticeship Related Changes. 17
    - Employment Agencies and Educational Institutions. 18
    - Women in Employment 19

- What Must Be Done 21
  - By the United States Department of Labor 21
  - By State Agencies: Education and Employment 22
  - By Women 23

Page

CHAPTER 2: PROJECT INTERVENTION TECHNIQUES. 27

- In the Division of Apprenticeship and Training. 27
- Public Information. 29
- Target Area Activities. 31
- Employer Attitudes in the Target Area: Comparative Surveys. 33
  - Survey of Prospective Employers: 1970 . . 33
  - Survey Group and Method. 34
  - Recommendations: 1970 35
  - Comparative Survey: 1973. 36
  - Similarities in Data 37
  - Differences in Data. 38
  - Target Area Survey Conclusions 39
- Toward Target Area Placement. 41
- Taycheedah: Introducing Apprenticeship in the "Wisconsin Home for Women" 42
  - Rationale. 42
  - Process. 43
  - Observations 44

CHAPTER 3: OBSTACLES ENCOUNTERED: WHY WOMEN HAVEN'T BECOME APPRENTICES 47

- Apprenticeship System 47
  - Outreach Programs. 50
  - Age Limitations. 50
  - Internal Changes 52
  - State Plan for Equal Opportunity in Apprenticeship. 53
- Labor Unions Informed 57
  - AFL-CIO Women's Conference 57
  - Some Progress. 59
- The Public School System. 63
  - Inadequacy of Vocational Materials 63
  - Breaking the Boy's Tech Barrier. 68
  - The Guidance Community 69
  - Project Suggestions. 70

Page

Wisconsin Vocational, Technical, Adult Education System. 73
    Vocational System Surveys: 1970 and 1973 Enrollments of Women. 73
    Attitudes and Practices. 76
Wisconsin State Employment Service. 79
    Aptitude Tests 79
    Job Referrals. 80
    Job Counselors 81
    WSES Future. 82
Work Incentive Program. 85
    Signs of Co-operation. 85
    Toward Mutual Efforts. 86
Employers Need Incentives 89
Veterans' Preferred Status. 91
Decline in Total Economy - Increase in Project Scope 93

CHAPTER 4: INTERNAL BARRIERS: PROJECT IMPRESSIONS OF THE AMERICAN GIRL 99

The Problem 99
The Girls We Met. 100
How They View the Trades. 103
Age and Information Gaps. 105

CHAPTER 5: NEW APPRENTICESHIPS IN DAY CARE AND THE HEALTH OCCUPATIONS 111

Criteria for New Apprenticeships. 111
Background. 113
Dictionary of Occupational Titles Skill Codes Challenged. 115
Methodology for Stabilizing Apprenticeship in Day Care 117
Employers Subsidized and Organized. 118
Related Problems and Related Agencies 120
Creating a Journeyperson Skill Level. 121
Co-ordination with the National Child Development Associate 123
Possible Expansion. 124
Chronology. 125
Health Occupations. 127

Page

CHAPTER 6: THE FEMALE APPRENTICE. 133

Rationale: Women in Apprenticeship Survey. . . 133
Survey Population 134
Data Collection 136
Drop-Out Rates. 137
Observations. 139
    Motivation 141
    Age - The Female Apprentice. 144
    Education of Female Apprentices. 144
    Marital Status 146
    Public Financial Assistance: Heads of Households 147
    Wages. 149
    Quality of Training. 152
    Physical Aspects of Work 156
    Day Care Needs 157
    The Drop-out: A Summary 159
Employers of Women Apprentices Survey 165
    The Drop-out: Employer Responses. 165
    Conclusions: Women Apprentices and Their Employers. 172

CHAPTER 7: CONCLUSIONS: WOMEN IN APPRENTICESHIP -- WHY NOT? 175

PART ONE

The Apprenticeship Complex. 177

    Supervisory Agency 177
        Recommendations for the State 181
        Recommendations for the U.S. Department of Labor 182
    Employers. 182
        Recommendations for Employers 185
        Recommendations for the U.S. Department of Labor 185
    Unions 185
        Recommendations for Unions. 186
    Realistically Approachable Trades. 187
        Recommendations 189
    Expansion. 189
        Recommendations to the U.S. Department of Labor 190

Page

The Pre-Apprenticeship Complex. 191

Employment Agencies: Wisconsin State Employment Service and Work Incentive Program. 191
Recommendations for State Agencies. . . 193
Recommendations for U.S. Department of Labor. 193
Educational Systems: Public and Vocational Schools 193
Recommendations for Educational Systems 195

Women Themselves. 197

Recommendations to Women. 198
Recommendations to the U.S. Department of Labor. 199

PART TWO

Methodology and Project Observations About Ourselves 201

APPENDIX A: Apprenticeship Background Studies . . . 207

APPENDIX B: Partial List of Project Film Showings. 209

APPENDIX C: 1970-1973 Fox River Valley Employer Survey. 211

APPENDIX D: How to Become an Apprentice 219

APPENDIX E: How About Women?. 221

APPENDIX F: Learning and Earning: Wisconsin Women in Apprenticeship 223

Introduction 223
Unconventional Mother Turned Carpenter. 224
New Drafting Apprentice 225
A Niche in Printing 227
Apprentices Become Day Care Teachers. 228

Page

APPENDIX G: VTAE Survey. 229

APPENDIX H: News in Day Care Apprenticeship. 231

APPENDIX I: Women in Apprenticeship Survey of
Female Apprentices, 1972 233

APPENDIX J: Method of Calculation of Male
Drop-out Rate. 241

APPENDIX K: Women in Apprenticeship Survey of
Employers of Female Apprentices, 1973. . 243

LIST OF TABLES

Table	Title	Page
1	Wisconsin Active Women Apprentices and Trainees	7
2	Women Apprentices: Information Sources	48
3	Women Apprentices: First Source of Information	48
4	Employer Sources of Apprentice Applicants	49
5	Wisconsin Trade and Industrial Education Enrollment -- Grades 9-12	67
6	Vocational School Enrollment: Technical and Industrial Classes	74
7	Number of Licensed Day Care Centers in Wisconsin	114
8	Ethnic Breakdown of Survey Population	135
9	What was the one main factor that led you to become an apprentice?	142
10	Did you consider the work personally rewarding or not?	143
11	When you began you apprenticeship, did you expect to complete the program?	143
12	Female Apprentices: Years of Education	145
13	Are you presently married, widowed, divorced, separated or have you never married?	147
14	Are you the main support of your immediate family?	148

Table	Title	Page
15	Have you ever received any public financial assistance such as AFDC, WIN Program Fund, or other government sponsored programs?	149
16	Weekly Beginning Income of Female Apprentices	152
17	Was classroom related instruction for apprenticeship provided?	154
18	Do or did you know how or whom to contact in the Wisconsin Division of Apprenticeship and Training if you needed help or advice?	155
19	Was a skilled person or one of journeyperson rank working closely with you? . .	156
20	Were there any physical aspects of the job that you found too difficult...such as heavy lifting or standing for long hours?	157
21	How many children do you have?	158
22	Have you usually had satisfactory child care arrangements while working?	159
23	Why did you drop out of training?	161
24	Did you meet any resistance; by that we mean criticism or unfavorable comments and lack of cooperation from your family, friends, or co-workers when you first decided to become an apprentice?	162
25	While you were an apprentice, did you generally have friendly daily relationships with co-workers?	162
26	During your apprenticeship, was transportation to and from work a problem for you?	163

Table	Title	Page
27	For any apprentices with your organization who dropped out of the program (cancelled or suspended), what do you believe to be the reasons for their not completing?	166
28	For what reasons did your organization decide to train female apprentices initially?	168
29	Generally, did the apprentices have a good working relationship with the other employees?	169
30	Have you ever recommended training female apprentices to another employer in your trade?	169
31	How do you rate the on-the-job motivation of the female apprentices as compared with other employees? . . .	169
32	Did you receive any funds (for example, Federal Manpower Development Training funds) because you had (or have) apprentices?	171
33	Was the availability of such funds a motivating factor in your participation in on-the-job training for female apprentices?	171
34	Would you, in the future, ever recommend training female apprentices to another employer?	171

LIST OF ABBREVIATIONS

1. DAT: Division of Apprenticeship and Training
2. DILHR: Department of Industry, Labor and Human Relations
3. DOT: *Dictionary of Occupational Titles*
4. EEOC: Equal Employment Opportunity Commission
5. JAC: Joint Apprenticeship Committee
6. JOPS: Jobs Options Program
7. LEAP: Labor Education Advancement Program
8. MDTA: Manpower Development Training Act
9. VIEW: Vocational Information on Education and Work
10. VTAE: Vocational, Technical and Adult Education
11. WIN: Work Incentive Program
12. WISC: Wisconsin Instant Information System for Students and Counselors
13. WSES: Wisconsin State Employment Service

PREFACE

This report of the three-year project, Women in Apprenticeship, records the progress and shortcomings of a Wisconsin based effort to make more acceptable and normal the entrance of women into the skilled apprenticeable trades. Funded by the U.S. Department of Labor, this research-demonstration project was conducted jointly by the Wisconsin Division of Apprenticeship and Training, University of Wisconsin Extension, and in close informal collaboration with the Wisconsin Governor's Commission on the Status of Women. This combination of sponsoring agencies, with its total range of contacts, entrees, and interests, was basically responsible for the high degree of impact this modest undertaking was able to affect both within and well beyond the state of Wisconsin.

Working through the established decision-makers and influential personnel in the most essential public institutions made possible a much wider net than the small project staff could otherwise possibly have produced. By the close of the project it was apparent in many ways -- meeting agendas, policy changes, public issues, representation of women, language used -- that significant public education had been spearheaded. The staff of the Department of Apprenticeship and Training, the State Employment Service, Department of Public Instruction, Vocational Guidance Counselors, Department of Industry, Labor and Human Relations, University of Wisconsin Extension, as well as many employers and unions actively demonstrate their new "enlightenment."

The concentric circles of project influence have gone beyond the borders of this state. The project's intent, findings, and recommendations have been presented to public officials, continuing education for women conferences, national feminist groups, and many educators, counselors, employers and unions. Again, the breadth and unique combination of project sponsorship opened receptive channels that might have remained unknown or unavailable with more narrow auspices. From the University of Hawaii to Appalachian State in North Carolina, the film-discussion has been presented. The project has been on the agenda of national conferences of U.S. Employment Security Agencies, Interstate Association of Commissions on the Status of Women, National Vocational Guidance Association, National Organization for Women, Urban Research. Preliminary findings and awareness of the project have been incorporated by writers in such publications as Spokeswoman, Manpower and Breakthrough.

In addition to educating the employment world about the potential of women workers, an equally significant effect has been the enlightenment of educators and feminists about the potential of skilled occupations. Many myths and stereotypes of industrial employment and non-academic pursuits have either been laid to rest or at least significantly dispelled as a consequence of these sessions. The importance of training, skills, and union contracts especially for low-or-no paid workers has been brought home and the project has provided a congenial meeting and learning ground for employers, union women and union men, feminists and educators.

Project co-sponsor, Charles Nye, Administrator of the Division of Apprenticeship and Training, Wisconsin Department of Industry, Labor and Human Relations, and I conceived and developed the project plan and together we have personally participated in the work of the project. Originally designed as a two year research and demonstration effort for one individual to isolate, analyze and minimize the obstacles to women participating in apprenticeship training, the project has had two major amendments since it began in July, 1970. Norma Briggs, the project coordinator from 1970-1972, was the only staff member for eight months, when a request for additional staff funds was approved and Mary Bach assumed responsibilities as project field representative in the selected target area. A modified third year extension to focus on a study of the experiences of women apprentices allowed for the part time employment of Patricia Mapp from 1972-1973. Ms. Briggs, having exposed through project findings an unmet need in Wisconsin for public information regarding equal rights and the law, was called on in 1972 to administer a newly created Bureau of Community Services in the Equal Rights Division, Wisconsin Department of Industry, Labor and Human Relations.

The timing of this research-demonstration has had its pluses and minuses. The high unemployment from 1970-73, the imperative preferential hiring of Viet Nam era veterans, and the ongoing necessity to provide meaningful training and employment for racial minorities and young people have all magnified the difficulties of commanding attention and action on behalf of women. These are circumstances which face the entire employment world and which confirm the 1963 conclusion of the President's Commission on the Status of Women: the problems of women workers will only be solved in a healthy economy with full employment.

At the same time this three-year period was one in which the national movement of women to be heard and to have a voice in decisions affecting their own lives gained enormous momentum. Public responses to that movement included Revised Order 4 requiring affirmative action for women, the EEOC's 1972 revised guidelines on sex-discrimination, NEA's focus of sex-stereotyping in the schools, HEW's Task Force on Discrimination Against Women in Education, incorporation of a chapter on Women in the President's Economic Report, Congressional passage of the Equal Rights Amendment and states' action on ratification, work of Citizens Advisory Committee on the Status of Women to highlight numerous corrective measure, distribution of President Nixon's Task Force report on Women's Rights and Responsibilities, inauguration of an Interstate Association of Commissions on the Status of Women, action including back-pay awards on charges of sex-based discrimination in employment and in education. These and innumerable additional advances have made it impossible for all but the slowest learners to ignore the serious, urgent nature of the problem. Certainly they have contributed to a far more supportive milieu than existed in 1970 and consequently to the success of this project.

Dr. Kathryn F. Clarenbach
Professor, University of Wisconsin Extension
Chairperson, Governor's Commission on the
Status of Women

CHAPTER 1. PROJECT OVERVIEW

I. WHY APPRENTICESHIP ?

II. WHY WOMEN ?

  A. Reality and Myth

  B. "Women's Work:" *The Dictionary of Occupational Titles*

III. WHAT WAS DONE

  A. Public Education

  B. Surveys

  C. Background Studies

  D. Changes Made

    1. Apprenticeship Related Changes

    2. Pre-apprenticeship Related Changes -- Employment Agencies and Educational Institutions

    3. Women in Employment

IV. WHAT MUST BE DONE

  A. By the United States Department of Labor

  B. By State Agencies: Education and Employment

  C. By Women

CHAPTER 1. PROJECT OVERVIEW

The easy entry and acceptance of women in the skilled apprenticeable trades is the continued shared goal of the Wisconsin Division of Apprenticeship and Training and the University of Wisconsin Extension, Center of Women's and Family Living Education. A three year project (1970-73) undertaken by the two agencies, in which the obstacles to employment of women through apprenticeship have been isolated, analyzed and, where possible, minimized, has provided a sound base and a flexible springboard for the increased participation of women in skilled trades.

The intent of this report is to provide governmental agencies, employment and education communities, as well as interested women and men, with a complete picture of the previous, current, and potential status of Wisconsin women in apprenticeship. The project, variously described as "applied research" or "research and demonstration" was launched in mid-1970 with an optimistic, simple, yet complex question: "Women in apprenticeship -- why not?" and it concludes with much of the question having been answered in terms of barriers exposed, changes set in motion, and recommendations made.

"Why not?" in 1973, still is an appropriate question, however, as the overall disparities between higher men's and lower women's wages continue in all areas of employment and as competitive numbers of women, in their social, educational or employment contracts, have not yet been motivated toward apprenticeships -- either with background technical knowledge, or with necessary apprenticeship occupational information.

I. WHY APPRENTICESHIP ?

The apprenticeship route for the integration of women in the skilled trades was selected precisely because the absence of women was so stark and the occupational range of women apprentices so regrettably narrow, and because it confined the project's objectives sufficiently to be both workable and measureable. In addition, the project staff and sponsors became increasingly convinced that the apprenticeship system itself, when properly designed and administered, has real utility and value. It offers to the economically disadvantaged and to those inexperienced in the labor force both paid learning of an employable skill and the virtual guarantee of post-training employment. The skills and broad theoretical training involved are portable in our mobile society and durable in the rapidly changing technologies of industry.

For those unfamiliar with the skilled trades and for those with little experience with on-the-job training, it is often difficult to understand the difference between mastering the many skills involved in such work as opposed to ingesting descriptions of the work from a printed page and practicing the motions a time or two. Obviously the time factor is enormously different in the two approaches as is the final level of proficiency.

Apprenticeships in Wisconsin, divided among the construction, industrial, graphic arts and service trades, are carefully worked out methods of learning the actual operation of the entire range of activity throughout any given trade. The on-the-job learning occurs with the guidance of an experienced journeyperson; simultaneous and appropriately timed academic instruction of the necessary theory is provided by the Vocational, Technical and Adult Education system. During the entire work and related instruction process, the apprentice is paid by the employer at an increasing rate and in accordance with a contract signed by employer, apprentice, and the state. An apprenticeship covers a much broader and more intensive training than the usual on-the-job training; the apprentice herself/himself is consequently competent to hold better and more varied positions on completion.

In 1970 in Wisconsin, there were 8,500 male apprentices and 393 females: 224 in cosmetology; 45 cooks, and 24 scattered in 8 other occupations. Given the stability of apprenticeship as a training mechanism, and the existence of formal programs in 360 occupations, there were realistic expectations that significant integration of women could be achieved in many of the trades. Actually the total number of females involved in apprenticeships has not dramatically increased during the span of the project. But while male enrollments have dropped by 1,000, the number of women has been constant, and there has been an important shift from the two dominant occupations in which women were apprentices in 1970 -- cosmetology and cooking -- to involvement in some 50 different trades. The shift represents an increase of 130 females -- from 69 to 199 -- outside of the field of cosmetology. (See table 1).

Table 1 Wisconsin Active Women Apprentices and Trainees

	March 70	March 71	March 72	March 73
Cosmetology	324	282	173	183
Barber	10	15	16	20
Cook	45	26	6	8
Lithographic Stripper	6	5	2	2
Baker	1		1	2
Lithographic Camerawoman	2	1		
Printer	1	1		
Architectural Draftswoman	1			
Florist	1			
Watchmaker	2		1	
Pharmacy Technician		4	2	1
Rehabilitation Technician		3		
Weekly News Printer		1	1	1
*Policewoman		1	1	
Sign Painter		1		
Day Care Teacher			73	78
Homemaker Home Health Aide			30	30
Cook-Chef			4	
Restaurant Cook			10	9
T.V. Repairwoman			1	1
Health Facilities Cook			6	14
*Central Office Repairwoman			1	1
*Assistant Manager			1	
Medical Records Technician			1	1
Physical Therapy Aide			1	1
Newspaper Printer			2	2
Surface Technician			1	1
*Police Detective			1	1
*Nursing Assistant			1	
Meat Cutter			1	1
*Comm. Dispatcher			1	
*Rubber Engraver			1	1
*Manager			1	
Lithographic Artist			1	1
Public Health Aide				1
Silk Screen Cutter				4
Second Class Engineer				1
Layout Stripper				1
Draftswoman				2
*Deputy County Treasurer				1
Div. of Apprenticeship Trainee				1
Die Maker				1
Optician				2
*Elect. Inspector				1
Case Aide				1
Printer Operator				1
Commercial Artist				1
Dental Lab Technician				1
Printer Composition				1
Musical Instrument Repair				1
TOTAL	393	340	341	382
EXCLUSIVE COSMETOLOGY	69	58	168	199

* On-the-job training programs under the supervision of the Division of Apprenticeship and Training.

II. WHY WOMEN?

A. Reality and Myth

The project confirmed and confronted both attitudinal and institutional roadblocks as they impeded women, with detailed changes to be noted in this and other sections of the report. Probably the most telling result of the three year effort was the basic and essential sensitizing of a range of institutions and individuals to the existence of the problem: women need to work; women need the same training and employment conditions available to men; and women have capabilities to function satisfactorily across the gamut of skilled occupations. Until such concepts were clearly understood and accepted by all those concenred, other barriers could not be moved.

An underlying assumption of the project, that women can function productively in the skilled trades, is grounded in fact. Wisconsin's history is replete with the 19th century contribution of pioneer women and the 20th century involvement of women in industry. For example, the World War II experience showed significant gains toward full utilization of women workers as they contributed heavily to the economic production of the state: women constituted 28% of the state's war production employees between 1943 and 1946; over 109,000 women worked for 593 non-agricultural Wisconsin firms. "The manpower shortage and the tremendous increase in industrial capacity which necessitated the use of women in such tasks, proved conclusively that there were few jobs in modern industry which women are incapable of handling."[1] It is notable that women were easily absorbed into the technical tasks demanded by industry, but none of the 109,000 was trained for a long range career through apprenticeship. Most women were quickly taught only one mechanical task; some have continued in those same, entry level jobs for 25 years with no advancement, while young men, veterans, and only recently, minority males, have been expressly chosen to fill the higher paid apprenticeship positions in the same shops.

It was this historical void in the apprenticeship tradition which the project addressed itself to filling. Many of the barriers to women in skilled occupations were initially well known and documented; others were discovered in the course of the research-demonstration. Among the damaging, long-perpetuated myths encountered were, "Women are not serious about jobs; their absenteeism and turnover are disproportionately high; women don't have mechanical aptitudes; women require costly and elaborate restrooms; women are weak and over-emotional; and, the proverbial, women's place is in the home."

The work performance and capability myths were easiest to dispel with facts and examples. But some of the grim statements about the employment potential of women are based in de facto situations where, for example, women do double duty at home and on the job; where child care facilities are inadequate or unreliable; and where reasonable maternity leave has not been available. Therefore, in addition to attacking individual myths with a public information campaign, the project also assumed a wider "women in employment" advocacy role as was anticipated in the original proposal objectives.

---

[1] Ruth De Young Kohler, The Story of Wisconsin Women, The Committee on Wisconsin Women for the 1948 Wisconsin Centennial, 1948.

B. "Women's Work:" The Dictionary of Occupational Titles

Among the commitments which evolved as the project unfolded was recognition that the employment of women held a two-pronged imperative. Not only must women have completely open access to better paying positions traditionally filled by and reserved for men, but if significant numbers of women are to benefit, so called "women's work" where women now predominate, must be upgraded and given its due. From the traditional, assigned roles which place men in higher paying, technical employment and women in low paying positions have emerged the false categories of "men's jobs" and "women's jobs." Working women, in turn, have accepted both the low expectations of themselves and society's low paying employment. The rock bottom Dictionary of Occupational Titles[2] skill complexity ratings in the categories of data-people-things in many of the so called "women's jobs" highlight the fallacies that work traditionally done by women reflects little or no skill, requires virtually no training, and commands little remuneration.

Whether or not it was an original intent of its formulators, the Dictionary of Occupational Titles has been used to determine amounts of federal expenditures for reimbursed on-the-job training programs. When the project attempted to introduce apprenticeship to the day care teacher and homemaker home health aide occupations, the deceptively low Dictionary of Occupational Titles code of 878 (the digit 8 represents "no significant function") assigned to such work served to confirm the beliefs of apprenticeship and employment service staffs that government funding of a training program was impossible because there were "obviously" no skills to be learned in these "women's jobs."

---

[2] Dictionary of Occupational Titles, Volume 1, 3rd Edition, U.S. Department of Labor, 1965.

Consequently, the project sought and gained temporary code revisions, and turned to an examination of the DOT codes assigned to other female dominated occupations. A Wisconsin based study designed to analyze the jobs and to question the reliability of the system itself is in the process of challenging and changing the distorted view of "women's work" which has been rigidly perpetuated in the Dictionary of Occupational Titles.[3]

Among the other ramifications of the question, "Women in apprenticeship -- why not?" were several key issues linked to working women in or out of apprenticeship -- the skill ratings in the Dictionary of Occupational Titles; maternity leave; child care facilities; and career ladders for women employed in the state civil service -- each of which led the project to either specific action or to proposing a separate study.

---

[3] Dictionary of Occupational Titles Research Project, 1971-1973, Wisconsin Department of Industry, Labor and Human Relations and University of Wisconsin Extension, Kathryn F. Clarenbach, Director.

III. WHAT WAS DONE

This project was initially conceived as a two year demonstration and research effort to be conducted statewide by one staff member employed in the Wisconsin Division of Apprenticeship and Training. After 8 months, an additional female staff member was assigned to work in a designated target area "to see what would happen" if apprenticeship placements were secured. A third year extension for a part time staff person was granted specifically to investigate the question of why some women had dropped out of training programs during the first two year phase of the project.

A. Public Education

The methods and objectives included observation, analysis, recommendation and action at all levels of the apprenticeship-employment matrix -- seeking always to expose and remove the obstacles. Through speeches, radio and television presentations, production and frequent showing of the film, _Never Underestimate the Power of a Woman_, participation in workshops, and preparation and distribution of printed materials, the project undertook a personal persuasion, public education campaign. Target groups were those directly engaged in the promotion and supervision of apprenticeship -- the staff of the Division of Apprenticeship and Training, as well as the State Employment Service, employers, unions, vocational counselors and the general population of women themselves.

B. Surveys

After selecting a geographical "target area" in which to concentrate demonstration attempts, the project devised a series of surveys to gather information which might point the way to recommendations and remedial action.

1.) Four minor surveys were designed to trace the enrollment patterns of women in the Vocational, Technical and Adult Education System, and to measure changes in apprenticeship employment patterns as perceived by members of the Division of Apprenticeship and Training. These periodic pollings showed:

    a.) Little change from 1970-1973 in the pre-apprenticeship preparation of women in the vocational schools;

    b.) Marked increase in the promotional efforts on behalf of women in the Division of Apprenticeship and Training, and;

    c.) Concurrence of both the vocational system and apprenticeship staffs that the employment advancement of women is restricted primarily by social custom and discriminatory practices.

2.) Two major studies resulted from:

    a.) Comparative data gathered from personal interviews among 78 manufacturing employers in the target area in 1970 and 1973. The results confirmed that misunderstandings, ignorance, bias and discrimination in job posting procedures and hiring practices had to be exposed and changed before women could achieve equal apprenticeship opportunities.

b.) Complementary surveys of the women apprentice and her employer -- specifically interviewing 159 of those women who had entered apprenticeship during the first two years of the project. These investigations provided a complete employment profile of the continuing, graduated and drop-out apprentice. They showed a high level of employer satisfaction (78% believed women apprentices to be equal or better in reliability and job performance to other employees); and a relatively low, 24% drop-out rate among women apprentices. The drop-out rate, when compared with an estimated national average of 50% for the general apprenticeship population is positive encouragement to employers, unions and to women themselves, who have been told that their presumed high work turnover makes them high risk employment liabilities.

C. Background Studies

A study of the relative cost and benefits of apprenticeship to women was not attempted, but through a review of some of the research on the system itself, the project sought to understand the merits and shortcomings of apprenticeship vis a vis other employment or training processes. For example, the low drop-out rate for women might be rationalized by concluding that women, lacking viable alternatives, readily accept low paying employment (represented by the early stages of training), and that the apprenticeship should not necessarily be coveted.

Both the national Farber Report and the Purdue Study on Apprenticeship verified that the hiring practices, the terms of training, and in many cases, the content of training were in need of revision. In Wisconsin, a 1970 study of the drop-out specifically yielded recommendations along the same line -- that the designated period of training may be too long, beginning salaries too low, and related instruction not relevant. None of the researchers, however, isolated women as a group to analyze their apprenticeship experiences, attitudes and expectations.[4]

Therefore, while the Women in Apprenticeship study set out to reveal and challenge any factors in apprenticeship which preclude or disadvantage women, it was able to confirm or reject the findings of other research. The positive project observations are: a.) that many women, particularly the non-college bound have economic security, job satisfaction, social mobility, and personal fulfillment to gain from the journeyperson status conferred by a completed apprenticeship; and, b.) that recommended changes, especially in the stronger enforcement of equal opportunity legislation as it applies to apprenticeship, and the provision of waivers for access level restrictions, will only enhance apprenticeship and the economy by producing more broadly trained skilled workers whose ranks will include women.

---

[4] See Appendix A - Apprenticeship Background Studies.

D. Changes Made

As the project defined problem areas, a series of institutional changes were recommended, accepted, and applied in Wisconsin. Some were more quickly and easily achieved than others; some are short-range, and others represent long-range processes set in motion. All changes have been instituted and are a direct result of Women in Apprenticeship Project intervention.

1.) APPRENTICESHIP RELATED CHANGES

a.) Changing apprenticeship job titles in Wisconsin to eliminate sex designations and omitting sex references from promotional literature.

b.) Including women in the affirmative action pledge and in the State Plan for Equal Employment Opportunity in Apprenticeship (Title 29 Part 30).

c.) Instituting the Day Care Teacher and Homemaker Home Health Aide Apprenticeship Programs, providing apprenticeship opportunities for over 100 women.

d.) Hiring women and utilizing the apprenticeship method of training women to become members of the once all-male professional Division of Apprenticeship and Training staff.

e.) Recommending waivers of collective bargaining agreements so that women could compete for carpentry, painting, and metal engraving apprenticeships.

2.) PRE-APPRENTICESHIP RELATED CHANGES -- EMPLOYMENT AGENCIES AND EDUCATIONAL INSTITUTIONS

a.) Creation of an apprenticeship liaison position in each Employment Service office in the state to bridge the apprenticeship information gap.

b.) Work Incentive Program and Apprenticeship staff exchanges to focus on eliminating sex stereotyping from their agency functions.

c.) Removal of sex designations from job titles, recognized by the State Department of Industry, Labor and Human Relations, and used by the Employment Service and the Work Incentive Program.

d.) Adopting a State Maternity Leave ruling which defines child birth related absences as any health related disability, thereby assuring leaves of absence and job reinstatement.

e.) Opening of the former Milwaukee Boys' Technical High School to girls and changing the name to Milwaukee Technical High School.

f.) The State Department of Public Instruction eliminating all sex designations from the Wisconsin Instant Information on Education and Work vocational guidance materials, used in 90% of the state's high schools.

3.) WOMEN IN EMPLOYMENT

a.) Supporting the convening of the AFL-CIO State Women's Conference, 1970-1973.

b.) Producing a nationally distributed film, Never Underestimate the Power of a Woman, aimed at dispelling the myths of women in employment.

c.) Initiating the Dictionary of Occupational Titles review and revision of child care and health related occupations.

d.) Initiating the amendment to federal legislation, via the Wisconsin Congressional delegation, permitting military widows and orphans to use educational benefits for apprenticeship employment.

e.) Designing the Intergovernmental Personnel Act Project, the Department of Industry, Labor and Human Relations, to investigate hiring and promoting women in the Wisconsin State Civil Service.[5]

f.) Proposing the Maternity Leave Project, Department of Industry Labor and Human Relations, to research costs and benefits to employers of providing insurance benefits for pregnancy and childbirth to women workers.[6]

---

[5] A Study to Determine Career Patterns of Women in State Service and to Devise Methods for their Full Utilization, July 1, 1972-June 30, 1973, Intergovernmental Personnel Act, Department of Industry, Labor and Human Relations, Norma Briggs, Director.

g.) Advocating the creation of women's advocacy positions in the State Department of Personnel and in the Bureau of Community Services, Division of Industry, Labor and Human Relations.

---

[6] Wisconsin Maternity Leave and Fringe Benefits: Policies, Practices and Problems, October, 1972 - February, 1974, Wisconsin Department of Industry, Labor and Human Relations, Jennifer Gerner, Project Director.

IV. WHAT MUST BE DONE

The future implications of the Women in Apprenticeship Project for federal and state agencies, employers, unions, and women converge on actions leading to greater legal and social sanctions for women to participate in the skilled trades, and thereby in apprenticeship. Some necessary next steps are:

A. BY THE UNITED STATES DEPARTMENT OF LABOR

1.) Sponsoring of apprenticeship outreach programs for women designed to meet their pre-apprenticeship technical and application skill needs. (Such programs as the Labor Education Advancement Program exist in Wisconsin, but by priority and focus, serve only minority males.)

2.) Incorporating major revisions in the 1976 edition of the Dictionary of Occupational Titles to a.) eliminate gender specific job titles, and b.) to recognize the substantiated changes in skill complexity codes of those child care and health related occupations which have been reanalyzed.

3.) Amending Title 29 (CFR, Part 30, as it governs apprenticeship) to include women in apprenticeship affirmative action plans and also in the goals and timetables for compliance.

4.) Providing apprenticeship employers with a subsidy or tax credit to compensate for training costs.

5.) Educating through a promotional campaign, both management and labor on discriminatory patterns which might exist in their collective bargaining agreements.

6.) Reviewing the criteria for what constitutes an "apprenticeable" trade nationally with a view to meeting the skilled labor shortage in, for example, middle level, technical medical occupations through the apprenticeship system.

B. BY STATE AGENCIES: EDUCATION AND EMPLOYMENT

1.) Re-examining the effects of beginning age restrictions in apprenticeship standards, and advocating waivers when age limitations eliminate women from apprenticeship application.

2.) Producing and distributing an apprenticeship information film or video tape addressed to junior and senior high students, and aimed at countering notions of sex-stereotyping in the world of work.

3.) Making available with equal promotional efforts to boys and girls, technical-industrial classes and apprenticeship occupational information in the public schools.

4.) Eliminating sex designations from vocational guidance materials as in the Vocational Information on Education and Work series, and from the promotional literature of the Vocational, Technical, Adult Education System.

5.) Achieving a balance of males and females on state guidance, employment service, and apprenticeship staffs.

C. BY WOMEN

1.) Challenging through the Federal Equal Employment Opportunity Commission and State Equal Rights Divisions, existing discriminatory hiring and employment practices.

2.) Organizing within existing labor unions to bargain for equal access to training opportunities (including open job posting and eliminating preliminary, irrelevant, "bull-work"), and for management level awareness training to help ease the transition of women into previously all male shops.

3.) Enrolling in pre-apprenticeship technical training courses and actively seeking apprenticeship information through vocational guidance, state employment or apprenticeship staffs.

CHAPTER 2. PROJECT INTERVENTION TECHNIQUES

IN THE DIVISION OF APPRENTICESHIP AND TRAINING

PUBLIC INFORMATION

TARGET AREA ACTIVITIES

EMPLOYER ATTITUDES IN THE TARGET AREA: COMPARATIVE SURVEYS

- Survey of Prospective Employers: 1970
- Survey Group and Method
- Recommendations: 1970
- Comparative Survey: 1973
- Similarities in Data
- Differences in Data
- Target Area Survey Conclusions

TOWARD TARGET AREA PLACEMENT

TAYCHEEDAH: INTRODUCING APPRENTICESHIP IN THE "WISCONSIN HOME FOR WOMEN"

- Rationale
- Process
- Observations

CHAPTER 2. PROJECT INTERVENTION TECHNIQUES

IN THE DIVISION OF APPRENTICESHIP AND TRAINING

The project sought to have as broad an impact as possible. Initially, one female was selected to be the project co-ordinator. The personality and characteristics of this key individual proved to be one of the strongest forces in exposing resistance and discrimination where well meaning employers, union members and state employment staff had not recognized it. She assumed the Women in Apprenticeship assignment as the first female professional on a staff of male apprenticeship field representatives, many of whom themselves had served as apprentices, and therefore were well steeped in the apprenticeship facts of life.

Her early analysis of the task at hand in eliciting the support of the 16 industry and training representatives was, "There were varying shades of acceptance and skepticism which led me to conclude that while I was learning the basics of apprenticeship, it was also part of my job to assemble and present the facts of women in employment so that the representatives would not only know what they were now expected to accomplish because of Division fiat, but would themselves be sufficiently convinced of the merits of moving women into skilled trades to be able to handle constructively the anticipated reluctance of employers to this new idea." Her dilemma is illustrated by her early attempts to refer a strong woman, in good health, to fill a business machine repair apprenticeship. The employer rejected the idea of a woman because the job was "too heavy." The DAT representative on the spot was not prepared to counter the employer's arguments. A few days later another field representative placed a male apprentice in a business repair position because he had medical problems and was only able to do "light work."

It was with a high level of enthusiasm and determination that she set out to learn the theory and practice of apprenticeship and to conduct continual consciousness raising among staff colleagues. Male assumptions, for instance, about putting more "fellows" on programs, about male only occupations, or about the inability of women to endure long arduous years of training and schooling, were encountered daily. Where living examples of successful female models in the trades did not exist, and when challenged with the questions, "Why would a woman ever want to become a plumber?", her simple response was, "Why not?" Or more directly, "Why would a man want to become a plumber?", until many of her adversaries were gradually converted to also question, "Why not?"

Her main intervention tool was personal persuasion, coupled with facts with which to dispel the victimizing myths. Sensitizing the DAT staff appeared to be the most immediate step in unearthing obstacles. It was the most obvious institutionalized, yet unintentional detriment to including females in apprenticeship. The task was continual, with a fine line necessarily maintained between professional challenges and petty gadflying which might cause negative personal repercussions. The risk of losing vital co-operation while exposing misconceptions and thereby stepping on some toes was very real.

The subject of women's equality has been a popular news item during the life of the project, and has had a full range of both positive and negative reaction. The arguments of equal pay for equal work or of females having equal training potential often have been discredited with jokes about bra burning, rampant sexual freedoms or mothers abandoning their children to become steeple jacks. Dislodging the hidden prejudices among co-workers so that they could seriously accept the prospect of women in the trades was a major project challenge, not to be ignored in its importance in the total project evaluation.

PUBLIC INFORMATION

The need for public information materials extended from DAT staff to employers, unions, and to women themselves. A film, Never Underestimate the Power of a Woman, was produced and completed in early 1971 to show women successfully participating in the labor force in Wisconsin. The females driving trucks, operating a crane, drafting and working on the assembly line dramatize the capabilities of women while a researched narrative provides skeptical employers with the reality of female work and production statistics.

The film has been one of the most effective concrete promotional tools developed by the project.[7] Employer and union conferences initially provided the greatest demand for the film. Women's groups throughout the country currently request the film from the University of Wisconsin Bureau of Audio Visual Instruction 4 to 5 months in advance, since even with four copies in circulation, requests and use are continual. The film, for its purpose, is an adequate first of its kind. However, high school girls are almost universally reluctant to identify with the majority of middle aged women depicted. Another film or video tape which is equally persuasive and non-didactic, yet which aims specifically at undoing the unique sex-stereotyping which many high school girls experience and internalize should be produced. Such a visual instrument for increasing the numbers of potential apprenticeship applicants before their career or non-career plans are solidified would assuredly receive wide distribution since the project itself has helped create a demand through sensitizing vocational counselors to the need for unbiased occupational reference materials. The 1971 Women in Apprenticeship proposals to develop a second film for use in the project were regrettably denied by both the United States Department of Labor and the Department of Health, Education and Welfare.

---

[7] See Appendix B - Partial List of Film Distribution.

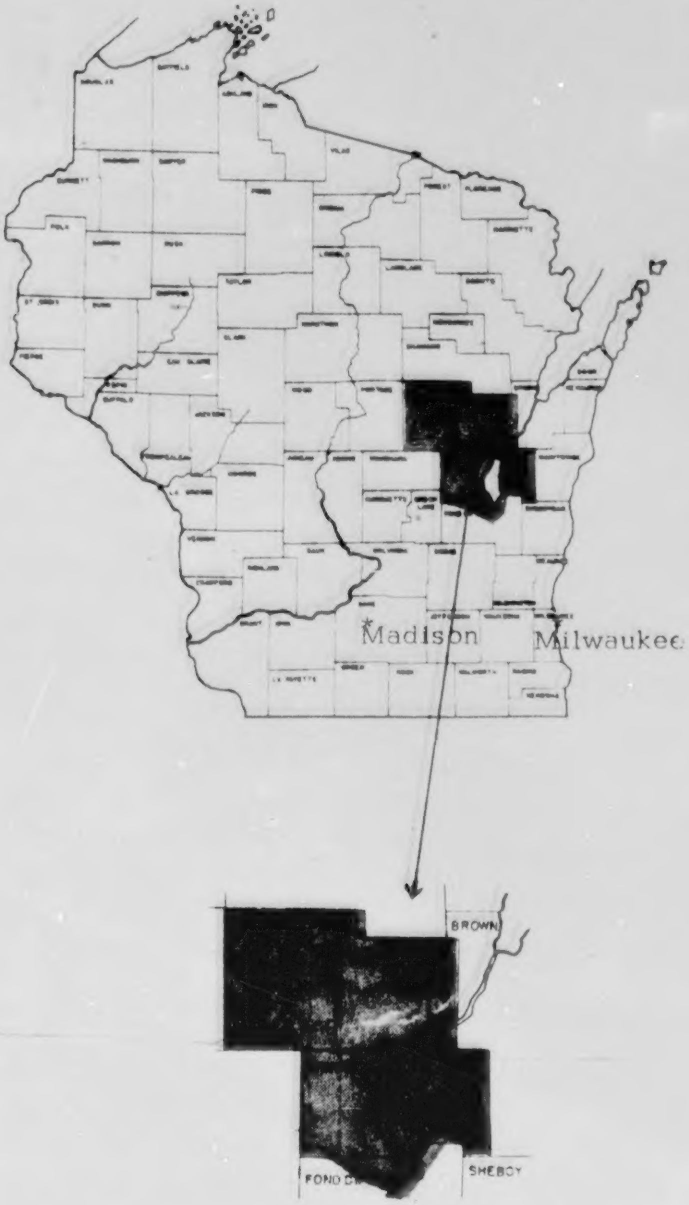
TARGET AREA ACTIVITIES

The project's investigative function included analyzing employer attitudes and practices to discover any misconceptions which could be dealt with forthrightly, and to capitalize on any situations where women might be employed as apprentices. A target area, the Fox River Valley, presented the greatest potential for an initial employer survey in 1970 and for a continued demonstration effort linked to the project goals.

The area includes the cities of Appleton, Neenah, Menasha and Oshkosh. The existence of a range of small and large employers in both urban and rural settings was part of the criteria used for selection of the target area. A well established vocational system which had served apprenticeship needs exists in Appleton, the geographic center of the region. The high concentration of industry and the relative absence of formal employment projects added to the desirability of the area as a project location. There also was a higher proportion of apprentices per capita than in any other area of the state. The only adult women's prison in Wisconsin in nearby Taycheedah might allow for apprenticeship program expansion. Other

WOMEN IN WISCONSIN APPRENTICESHIP

TARGET AREA


Madison
Milwaukee
BROWN
SHEBOY
FOND DU

CITIES

1 Appleton
2 Fond du Lac
3 Menasha
4 Neenah
5 Oshkosh
6 Taycheedah
7 Waupaca

urban centers were systematically eliminated for reasons of distance, or in the case of Milwaukee, because there was a multiplicity of programs and organizations which would require complex management and co-ordination with a new program.

Nevertheless, concentration of the project effort in the chosen geographical area predictably was difficult to co-ordinate because of the distance between the project co-ordinator, located in Madison, and the project field representative situated 120 miles away in Appleton. The field representative was selected to begin her varied tasks eight months after the project began. She was not involved in the 1970 survey of manufacturers and other employers of apprentices which was designed to provide useful base information for her work. She did, however, conduct the identical survey in 1973. Because the formal interviews were frequently followed by open discussions, she believes the process should have been an initial as well as concluding point of exposure to potential employers for her.

EMPLOYER ATTITUDES IN THE TARGET AREA: COMPARATIVE SURVEYS

Survey of Prospective Employers: 1970

The 1970 Fox River Valley survey yielded information on employer attitudes which pointed the way to recommendations for initiating social change. The recommendations were 1.) that both management and labor needed to be made aware of what practices are discriminatory in effect and specifically what the federal and state guidelines for equal employment are, and 2.) that employed and unionized women in the surveyed plants should provide the impetus for change in attitudes toward training opportunities for females.

Survey Group and Method

The survey population included 78 service and manufacturing firms which had registered apprentices.[8] Not included were service trades where women already were apprenticed as cooks, cosmetologists and barbers -- as well as the construction trades where lay-offs in 1970 were up to 18%, ruling out prospects for immediate female employment. Five male representatives of the Division of Apprenticeship and Training conducted the interviews. While their exposure to employers throughout the state might have prepared them to be diplomatic, appropriate and acceptable interviewers, a few revealed that some of their own misgivings about women in the trades could have been projected to employers, who might have been inadvertantly reinforced in their prejudices. It is not possible to speculate on the degree of bias either a male or female interviewer would inject into the conduct of the survey. A female staff member associated with the Women in Apprenticeship Project interviewed the identical employers in 1973 and reported that many were co-operative, if not cautious and guarded, lest they give an offensive response.

---

[8] See Appendix C - Women in the Trades: Fox River Valley Survey.

Recommendations: 1970

The 1970 survey findings indicated that, contrary to popular myth, the absence of women in skilled trades has little to do with their inability or unwillingness to work under conditions which are dirty, messy, noisy and so on -- since an average of 40% of the employers had women working under these conditions, but in an unskilled capacity. Sexual bias was less evident in those shops where women were already employed. A larger proportion of those who did (62% of those which employed females) than those who did not (45% of those who had no female employees) thought that women and men made equally good employees in production work. None employed female apprentices. The project concluded that those shops where females were already employed, small paper mills and other small manufacturers, would be the best "starters" for female apprentices. The second conclusion was that to hasten the recruitment of females, employers needed to be informed of the specifications of state and federal equal opportunity legislation. Given a declining economy, apprenticeship advancements for women could not be immediately secured. The dissemination of information, ultimately aiming at a saturation of the employment community with the facts of women's work potential became the realistic approach to the longer range goal of achieving actual apprenticeship positions for women.

Comparative Survey: 1973

Again in 1973, the project sought to assess changes in attitude among owners, managers or personnel officials, as well as to compare actual employment patterns in the target area. The identical questionnaire used in 1970 was administered in 55 of the original 78 apprenticeship establishments. Three key variables should be mentioned as possibly affecting the slight differences in attitudes reflected by responses. Twenty-seven percent (15) of the respondents had not personally participated in the 1970 polling; the 15 new training directors, with the exception of one female personnel official, were generally under 30 years of age, and were not alarmed at the suggestion that women might enter the trades. (The only female respondent was negative because she presumed child rearing and home responsibilities to be major interferences with serious employment.) Another previously mentioned variable was the identity of the interviewer as the target area female staff member. She concludes that because some respondents perceived her role as one of exerting outside pressure as a female posing legally threatening questions, they gave evasive responses. The third, and most significant variable, was the combined influence of the Equal Employment Opportunity Commission, the State Equal Rights Division and the state apprenticeship affirmative action pledge. Although not a part of the formal questionnaire, at least 50% of the respondents volunteered either direct (three were currently involved in sex discrimination suits against them) or indirect knowledge of government activities in behalf of equal employment or affirmative action for women.

Similarities in Data

The second survey in itself reflects no substantial change in attitude regarding willingness to train a female through apprenticeship. There continues to be a high proportion (45% in 1973; 66% in 1970) of employers who claim that there are apprenticeship positions for which women are unsuited. Those apprenticeships, as stated, include:

- Maintenance
- Pressmen
- Foundry man
- Millwright
- Mechanic
- Auto mechanic
- Machine repair
- Tool-die
- Welding
- Patternmaker
- Machinist
- TV business - service calls
- Farm equipment mechanic
- Erection of signs
- Pipefitters
- All of them

And the main reasons offered for the blanket exclusion were:

Heavy lifting involved
Physical requirements
Hard, grinding work
No female restrooms
Too dirty
Too dangerous

The other reasons were either of a judgmental nature such as, "Women should be on repetitive work where they don't have to think much;" "They are not dependable -- want maternity leave, time off;" or of a "protective" nature, "This shop is no place for women;" "Language in service department is too rough;" and "We do not want women to put up with (dirty, messy) conditions." Even while making such assertions, 65% of the employers acknowledged that they knew of women who did work which was *dirty*, *messy*, *involved heavy lifting* and required technical abilities.

Differences in Data

While their expressed attitudes had not shifted in two years, the internal shop practices of apprenticeship recruitment have changed slightly, to the extent that 5 females had applied for, and three were being considered for apprenticeships in printing and machine shops. As in 1970, there were no female apprentices employed by respondents. The total ratio of males to females employed in skilled work was 123 males to each female in 1970; in 1973 the proportion is 90 males to each female.

Among the shops which are large enough to fall under "open posting" procedures for apprenticeship training positions, 76% (compared with only 56% in 1970) said that they advertised in the plant where both production (mainly male) and office (mainly female) employees could learn of the openings. Because the numbers of women who have access to such open posting is still relatively insignificant, some plants, in order to comply with EEOC regulations, are seeking waivers to that procedure so that specific recruitment of females outside of the plant is possible. Only two employers ever used the newspapers to acquire apprenticeship applicants. With such "closed circuit" (yet liberalized over the 1970 conditions) recruitment procedures, it is not surprising that 20% (27% in 1970) of the employers claimed to have difficulty in getting qualified apprenticeship candidates.

Another liberalized trend was in the decreased use of maximum age limits for apprenticeship positions. The effects of the Wisconsin Fair Employment Practices and federal Age Discrimination in Employment Acts obviously have been interpreted by the manufacturing and printing trades to include apprenticeship. Sixty-five percent of those interviewed (59% in 1970) stated they had no maximum age limits for apprentices.

Target Area Survey Conclusions

The project concludes that the expressed knowledge of equal rights laws is an important employer prerequisite to the active recruitment and training of female apprentices. But, since as with the dispelling of other social prejudices, changes in attitudes and practices appear to lag behind knowledge of laws and facts, the project recommends further education of employers and unions to coincide with a proposed outreach, recruitment effort directed at prospective women apprentices. Such a practical outreach approach to achieving social change, if it involved employers and unions as well as interested women, could insure that a supply of qualified female candidates would have access to employment-training opportunities in the trades.

TOWARD TARGET AREA PLACEMENT

The one-woman efforts to demonstrate possible ways to integrate women in the trades in the Fox Valley were dramatically affected by massive lay-offs in industry in 1970-1971. Many employers in tool and die making, machine shops, wire works and paper mills when initially contacted, expressed a theoretical willingness to employ female apprentices, but expecting compliance and the active recruitment of females was unrealistic when once-active apprentices and journeypersons had already been laid off. The Farber Report hypothesis that apprenticeship enrollment and drop-out rates decrease with recession economies, apart from union or employer practices, is totally verified by the project experience in the Fox Valley.[9]

After publicizing the project goals to all civic and social organizations through an introductory letter, the project representative responded widely to speaking and film showing invitations. While for 18 months, she contacted all high schools in the area, met with individual students, sociology classes, counselors, and participated in career days, there was a simultaneous dearth of employment opportunity related to apprenticeship. Her discussions focused on the historical absence of women in the skilled apprenticeable trades and, idealistically, on the demands of a modern society for the full utilization of all of its workers. All of the personal contacts served the long range purpose of broad public education, but could not lead to immediate apprenticeship placements for women where no jobs existed.

---

[9] David Farber, "Apprenticeship in the U.S.: Labor Market Forces and Social Policy," Research in Apprenticeship Training, Proceedings of a Conference, (Madison, Wisconsin: The Center for Studies in Vocational and Technical Education, University of Wisconsin, 1967.) Passim.

When job opportunities were scarce, verbal commitments and theoretical endorsement of the recruitment and placement of women in apprenticeship by the Work Incentive Program (WIN) and the Wisconsin State Employment Service (WSES) were easily secured. But, as the economy gradually regained momentum in late 1972, in terms of production and manpower needs, WIN and WSES placed applicants indiscriminately, while the Veteran's Administration urged preferential hiring of Viet Nam era veterans. Each of these agencies, in its policies, practices and general attitudes, is treated in Chapter 3, where the institutional obstacles are discussed.

TAYCHEEDAH: INTRODUCING APPRENTICESHIP IN THE "WISCONSIN HOME FOR WOMEN"

Rationale

Observing that a full range of apprenticeship programs were offered to inmates at both the Green Bay Reformatory for Boys and Waupun Men's Prison, the target area staff person explored the training possibilities for female inmates at the Women's Prison in Taycheedah. With a population ranging from 70 to 120 females, Taycheedah, as a training site, was subject to the same rationale used for justification of apprenticeship programs in male institutions. Paroled or released females also had to make a living in the outside world. Their prospects for reassimilation and rehabilitation would be enhanced if they acquired trade skills, or were engaged in a transferable training program that could be completed through work and related classes in other parts of the state.

Process

Although the prison officials fully agreed, establishing trade training shops such as exist in male institutions was ruled out because of lack of funds and personnel. Instead, it was pointed out, the day to day maintenance of the prison population required cooks and bakers. Both of these occupations are apprenticeable, and both had on-going related instruction classes established in the local vocational school. The prison agreed to function as employer, providing a minimum salary and released time for related instruction for fourteen females who began in 1971 as cooks and baker trainees. Seven of the original group have left the prison: two continued their apprenticeships after securing employment in Milwaukee; two others were employed as cooks, but the employers were unwilling to enter into an apprenticeship agreement; three others had their indentures cancelled by mutual agreement before they finished their terms at Taycheedah; and the remaining 7 continue in training. As a pilot program, the training system showed promise for expansion, but while the existence of the institution itself is currently challenged by the Governor's Commission on the Status of Women, and it is undergoing severe budget cuts, the possibility of extending the apprenticeship system to other occupations is not great.

Observations

Perpetuating the ongoing cook/baker programs will require a more precise plan on the release of women for their successful transfer of credit and employment in an apprenticeship situation. Consequently, parole officers need apprenticeship information and DAT staff need to fill an outreach function which they are presently not funded or authorized to do.

The project staff member had responded monthly to requests from the institution for advice and consultation on conducting the apprenticeship training, helping to mediate scheduling conflicts for related instruction and serving to maintain motivation among the trainees. The small scale apprenticeship and employment guidance service provided by the project to the women at Taycheedah demonstrated a greater need for such an apprenticeship-counseling function to be situated where groups of women needing employment could be isolated for attention -- as in the WIN programs or in large urban centers. The advantage of such a comprehensive outreach program focusing on the preparation for apprenticeship employment for women is a contining project observation.

CHAPTER 3. OBSTACLES ENCOUNTERED: WHY WOMEN HAVEN'T BECOME APPRENTICES

APPRENTICESHIP SYSTEM

- Outreach Programs
- Age Limitations
- Internal Changes
- State Plan for Equal Opportunity in Apprenticeship

LABOR UNIONS INFORMED

- AFL-CIO Women's Conference
- Some Progress

THE PUBLIC SCHOOL SYSTEM

- Inadequacy of Vocational Materials
- Breaking the Boy's Tech Barrier
- The Guidance Community
- Project Suggestions

WISCONSIN VOCATIONAL, TECHNICAL, ADULT EDUCATION SYSTEM

- Vocational System Surveys: 1970 and 1973
  - Enrollments of Women
- Attitudes and Practices

WISCONSIN STATE EMPLOYMENT SERVICE

- Aptitude Tests
- Job Referrals
- Job Counselors
- WSES Future

WORK INCENTIVE PROGRAM

- Signs of Co-operation
- Toward Mutual Efforts

EMPLOYERS NEED INCENTIVES

VETERANS' PREFERRED STATUS

DECLINE IN TOTAL ECONOMY - INCREASE IN PROJECT SCOPE

CHAPTER 3. OBSTACLES ENCOUNTERED: WHY WOMEN HAVEN'T BECOME APPRENTICES

APPRENTICESHIP SYSTEM

The apprenticeship system, having its roots in the medieval Western European and modern American manpower needs, has traditionally accommodated the male employer and the male apprentice, either informally or on a formal, legal basis. In Wisconsin the feeder systems to apprenticeship roles have been: families where one or more sons were groomed to practice the craft of the father; the public school system, where non-college bound males have been channeled into those technical, industrial courses such as drafting, woodshop, auto mechanics and graphics, which give a broad orientation to apprenticeable occupations; the vocational system, which has developed technical courses, as well as high school equivalency courses, leading to favorable consideration in application for apprenticeship; the employment agencies such as Wisconsin State Employment Service, where aptitude tests are administered and referrals to employers take place; the Work Incentive Program, where individuals in the recent past have been counselled to seek and train for gainful employment which occasionally has included apprenticeship; and the Community Outreach Programs, such as the Labor Education Advancement Program (LEAP), which were designed specifically to compensate for the lack of preapprenticeship skill and knowledge among minorities.

The percentage of a sample of the apprenticeship population (including female cosmetologists) and their referral sources to apprenticeship are estimated as follows:[10]

Table 2

Relative/friends	183	(39.7%)
Employer/unions	30	(6.5%)
High school/voc. school	28	(6.1%)
Personal decision	210	(45.6%)
Other	10	(2.2%)

Women who became apprentices during the project years 1970-72 reported the following as their first source of apprenticeship information:[11]

Table 3

Relative/friends	15	(12.5%)
Employer/unions	107	(67.3%)
Wis. State Employment/ WIN/DAT	8	(5.0%)
Other	22	(15.2%)

Employers in the project target area, when surveyed in 1971 gave their main sources of apprentices as indicated below:

---

[10] Thomas A. Barocci, The Drop-out and the Wisconsin Apprenticeship Program: A Descriptive and Econometric Analysis, the Industrial Relations Research Institute, the University of Wisconsin, Madison, Wisconsin, 1972, p. 115.

[11] Wisconsin Women in Apprenticeship Survey of Female Apprentices, 1972

Table 4 Where do you get your apprentice applicants? (Asked of 78 industrial trade employers. Multiple responses allowed) [12]

	No. of mentions	% who mentioned source
From within the plant	32	(41%)
Vocational/high schools	38	(48%)
Employment Service/WSES	17	(21%)
Word of mouth referrals	17	(21%)
Other	16	(19%)

Although the family and social sources of information could not be traced, the project systematically has been able to isolate each institution or agency, including employer and union practices, as representing to some degree a barrier to the apprenticeship application and employment of females. The apprenticeship law itself is not discriminatory, and up until 1965, when minority groups -- blacks, chicanos and Indians -- pressed for equality of access to apprenticeship, the DAT did not view itself as an advocate of any group, except those already incorporated, either as employers or apprentices, under its jurisdiction. It was a system tightly designed to perpetuate the status quo, even to the point of deriving most state administrative staff members from skilled tradesmen who had personally experienced apprenticeship training. It is unfortunate that the analogies between minorities and females vis a vis their exclusion from apprenticeship were not seen more clearly in the design of the Women in Apprenticeship Project.

---

[12] Women in the Trades: Fox River Valley Employer Survey, 1970

Outreach Programs

The DAT had helped to fund and administer, since 1967, compensatory community outreach programs located in Green Bay, Milwaukee, Racine, Madison and Beloit which would recruit and train candidates in apprenticeship application skills. Following the dictates of Title 29, Part 30, requiring the apprenticeship agency to intervene in the recruitment and application process, the Division was able to alter its former posture of aloofness to recruitment and to take on direct, affirmative intervention before filing of the indenture. It is, however, contradictory with the Women in Apprenticeship goals of minimizing obstacles and placing women in apprenticeship that, with the support of the apprenticeship agency, the LEAP outreach programs focused on minorities, yet in practice and priorities, excluded females. The positive advocacy for females in the form of Women in Apprenticeship Project sponsorship does indeed represent a divergence from traditional DAT function, yet it does not extend to the referral and placement process, as specified in the LEAP goals.

Age Limitations

The extra-legal status of apprenticeship with respect to age limitations placed on prospective apprentices in itself defines the apprenticeship system as a barrier to females applying. The median age of the females who became apprentices from 1970-72 was 31. Therefore, the project experience has been that many of those females who have sought apprenticeship training are over the age limits set by the higher paid trades, particularly those in the construction industry. Carpentry, with the most liberal upper limit, for example, has a maximum cut off age for apprenticeship applicants of 27. During the project, the only female accepted by a Joint Apprenticeship Committee (JAC) for carpentry was 31 when she applied, and an exception to the rule was made.

Another female with previous work experience in drafting was denied an opportunity to apply for a drafting apprenticeship with a prominant machine tool making firm because she was in her mid 40's. The training director (also in his mid 40's) refused to consider an apprenticeship for anyone over 35 even though he expressed specific willingness to hire a female. The two DAT field representatives who made the recommendations did not have the force of law behind them, and, facing certain rejection, the female did not choose to apply.

The project has publicized the injustices of the age limitations, as well as the inconsistencies in priorities within the Department of Industry, Labor and Human Relations and the Federal Department of Labor -- both of which theoretically encourage the entrance of women into apprenticeship programs -- yet, both justify the exception of apprenticeship to age discrimination laws because apprenticeship implies an educational training program.

Internal Changes

In response to project awareness campaigns, symbolic changes have occured in the DAT, such as changing the male-only references in job codes and in employment literature, as well as abandoning the motto, "Today's Apprentices: Tommorrow's Key Men," in favor of "Wisconsin's Apprenticeship System: Geared to Progress." The Division itself is also moving toward more visible employment of females outside of the clerical domain on a permanent basis. One female is employed as an apprentice field representative; another as a field representative and a third as a veteran's specialist. To a great degree, the project director was able to raise the level of language and attitude consciousness among male Division staff members on the subject of sex stereotyping, but few of them claim to be ready to act as promotional agents, except as decreed by Division policy or law. Currently the allocation of time does not rank "promotion" of apprenticeship a high priority activity, nor is it within the legal charge of the Division to perform outreach and placement functions. One positive area of agency staff jurisdiction, however, is in the enforcement of federal and state equal opportunity in apprenticeship laws. It is in that realm of authority that the project sought to insure the inclusion of women.

State Plan for Equal Opportunity in Apprenticeship

The project director, backed by the project goals, served as a catalyst to the recognition of women in the design of the State Plan for Equal Opportunity in Apprenticeship adopted in 1972. Within limitations of law, apprenticeship employers and joint apprenticeship committees, made up of employers and union representatives, have been free to develop any selection procedure for apprentices which meets their specified needs and requirements.

The Federal Equal Employment Act of 1972 which eliminates sex as a determining factor for employment is also central in the state minimum compliance expectations. In addition, Revised Order #4, applying to employers who hold federal contracts, states that the employer must demonstrate the active recruitment and employment of minorities. Specifically, where apprenticeship employment by the government contractor is practiced, Federal Title 29, Part 30 as it is incorporated into the State Plan for Equal Opportunity in Apprenticeship in Wisconsin does further specify that the active recruitment of minorities and women is required by employers of five or more apprentices. The Wisconsin provisions mandating explicit affirmative action for women and minorities alter the passive, nondiscrimination implications of Federal Title 29, Part 30.

The project efforts to have even stronger measures on behalf of women in the State Plan for Equal Opportunity in Apprenticeship have not been adopted, in that the employer goals and timetables for compliance in the actual hiring of minorities do not specify women. A blanket pledge of intent (all too often signed after a training agreement is reached) stands as the strongest enforceable measure on behalf of women in the State Plan for Equal Opportunity in Apprenticeship. Each bona fide apprenticeship employer signs the following statement:

> This firm will recruit, select, employ and train apprentices during their apprenticeship without discrimination because of race, color, religion, national origin or sex.
>
> This firm will take affirmative action to provide equal opportunity in apprenticeship program (s) as required under Title 29 of the Code of Federal Regulations, Part 30 and the equal employment regulations of the State of Wisconsin.

The Wisconsin Apprenticeship Administration emphasizes the significance of the pledge, since no other state apprenticeship plan does explicitly prohibit discrimination because of sex. Enforcement of the regulation since April, 1972, has resulted in no direct placement of women. The documented, fruitless attempts at recruitment of female applicants in Wisconsin by major industrial employers as they seek to comply with existing regulations highlights the need for women to take advantage of a favorable hiring situation, especially where government contracts obtain.

But the project cannot logically thrust the burden for their apparent non-availability on women alone. Concerted social, educational and occupationally oriented outreach measures are called for to insure a.) that women will have access to knowledge about apprenticeship opportunities and b.) that they have the necessary application and pre-apprenticeship skills.

Further, the project emphasizes that a.) the Wisconsin apprenticeship pledge should not be viewed as an after the fact formality, but should be rigorously enforced by the Division of Apprenticeship and Training, and b.) that goals and timetables for employment of women should become a part of the existing Wisconsin *State Plan for Equal Employment Opportunity in Apprenticeship*.

LABOR UNIONS INFORMED

Apprenticeship has been subject to both industry and organized labor influence with apprenticeship application and training often being included in the terms of union bargaining agreements. In the industrial trades, where a union exists, "in-plant only" posting of training opportunities is common, a practice which automatically excludes women from application simply because they lack access to the job posting. A clear case of access discrimination (not necessarily related to the union bargaining agreement) existed in a factory employing women where the apprenticeship openings were routinely placed in the men's washroom.

Labor contracts also routinely specify that union members are to be given first choice for training positions, with seniority rights being a distinct advantage. In addition, some paper mills in the target area have height requirements and designate physically demanding "bull work" as the first job assigned a new employee. The injustice of such a practice is dramatized in the case of the instrument repair apprenticeship positions which demand no significant strength, but are recruited from among those employees who have survived the hazing of lifting and hammering into shape heavy and unwieldy cartons.

AFL-CIO Women's Conference

As such practices and their effects on women became evident, the project turned directly to union women and men, urging remedial actions. The target area survey recommendations to turn over to women already employed in industry the responsibility for their own advancement to equal opportunity through apprenticeship training was reiterated when the project offered concerted support to union women as they organized a women's coalition within the AFL-CIO.

The first state AFL-CIO Women's Conference in 1970 emphasized the challenges to the union membership in promoting the apprenticeship training of females. The Women in Apprenticeship Project sponsor was a featured speaker, delineating steps to be taken by interested females. Concrete results of constant project communication and publicity among union women in terms of increased numbers of females apprenticed do not yet exist. What does exist is an expressed formalized receptive attitude among male and female union leadership for the active recruitment of female apprentices. The height and rigorous physical work prerequisites are gradually being challenged and eliminated by both male and female union members. Since the inception of the Women in Apprenticeship Project, the State Council of AFL-CIO unions has consistently supported the general policies leading to improved employment conditions for females -- equal pay for equal work; maternity leave directives; and the National Equal Rights Amendment. And the AFL-CIO Women's Organization will again focus on apprenticeship possibilities and strategies for action at its 1973 autumn conference.

The female leaders within the Wisconsin United Steel Workers and Communication Workers of America unions are spokeswomen of record who see their roles as motivating women already in plants to move into trainee positions, as well as to bargain for management training which will sensitize those in supervisory positions, including journeypersons, to accept and provide support for those females who do take on apprenticeship training. The existence of the apprenticeship project has given the DAT and the University of Wisconsin Extension access to union conferences and strategy sessions for the expressed purpose of promotion of the dormant concept that women have economic and personal rewards to gain from skilled trade training.

Some Progress

By 1973 the union bargaining agreements which at the beginning of the project had limited the apprenticeship training announcement to in-plant posting had changed enough so that in at least two examples, women who formerly would not have had access to the apprenticeship posting were able to compete equally for training positions.

In an automotive parts plant, the job posting which had not been viewed by women workers previously was shifted to a central location at the directive of the DAT field representative. A 23 year old female machine sweeper who saw the posting successfully applied for a tool-die making apprenticeship and subsequently raised her salary from \$3.00 to \$4.30 an hour, to be increased to \$6-7/hr. during the course of training.

In the target area specifically, a metal products company with all male employees in the shop felt pressure to avoid an EEOC suit and was compelled, with union blessings, to waive its in-plant posting procedures to recruit a female engraving apprentice from the open labor market. The direct impact of the project on such actions is felt only through the greater force of federal affirmative action regulations and enforcement. Concerted efforts in the future toward maximizing opportunities for advancement of females in the labor market via apprenticeship must be backed by the force of laws which can override any accomodations, such as honoring age limits and in-plant posting procedures, which state apprenticeship law has previously made.

Project recommendations for necessary future data gathering:

1.) An analysis of a large number of labor contracts and plant rules for overt instances of sex discrimination and clauses specifically prohibiting sex discrimination.

2.) A review of federal and state equal rights case files on sex discrimination.

3.) A questionnaire administered to labor and management representatives in selected plants to determine patterns of contract administration and possible sex discrimination in company procedures. The questionnaire should be supplemented by an in-depth interview concerning attitudes toward sex discrimination and any means used by union or management to eliminate it.

4.) A comparison of practices in plants covered by Revised Order 4 and those not, to determine possible differences in patterns and practices in non-unionized plants.

The findings from such studies would ideally be communicated to employer groups and unions via labor-management teams sponsored by the United States Department of Labor.

THE PUBLIC SCHOOL SYSTEM

Inadequacy of Vocational Materials

The widest opportunity to reach potential apprenticeship applicants was found within the public school system. However, the curriculum tracking patterns which have reinforced and perpetuated the mother-homemaker and secondary financial responsibility of females appeared to be at their most restrictive in 1970. The project director discovered that a recently developed (1970) vocational counseling tool, Vocational Information on Education and Work - VIEW (known in Wisconsin as Wisconsin Instant Information System for Students and counselors - WISC), was blatantly sexist in categorizing jobs as open only to males, females or occasionally both. Most technical, industrial trades such as welder, tool and die maker, plumber, carpenter or electrician were indicated on the face of each information card as being open only to men, while detailed microfilm descriptions of the occupations and training processes assumed a male participant. The Governor's Commission on the Status of Women, with the guidance of the Women in Apprenticeship Project co-ordinator made formal protest of this violation of the spirit of the Equal Opportunity Law to the State Department of Public Instruction. The response acknowledging the deficiency was immediate. Further investigation of the cards revealed that apprenticeship as an avenue for training had been omitted from the system.

Two changes in the WISC system were in process by 1972, one to eliminate sex designations in job descriptions and the second to alert students to apprenticeable opportunities where applicable. Such visual career information is used in an estimated 40 states, with each state developing its own job definitions and descriptions. In Wisconsin the cards are the major source of career information for 90% of the state's high schools. It is likely that most states have not yet removed the sexist references, and it would seem timely that each should review the contents of such literature. The individual charged with instituting the changes in Wisconsin, on being interviewed, commented, "Our two year commitment to change the terminology of the WISC system started with questions raised by the Women in Apprenticeship Project."

The project's attempt to challenge set cultural mores reflected in the public school curriculum offerings included developing and distributing a career newsletter focusing on non-traditional career choices women have made, and inviting further inquiry. Useful, widely distributed publications from the Women's Bureau were pamphlets #52, Why Not Become An Apprentice? and #54, Changing Patterns in Women's Lives. The information vacuum further prompted the project director to prepare a brochure, How to Become an Apprentice,[13] and How About Women?[14] One of the state's prominent newspapers, the Milwaukee Sentinel, published a series of articles, "Women in Apprenticeship," highlighting the personal experiences of women who entered apprenticeship training. A formal pamphlet, Earning and Learning: Wisconsin Women in Apprenticeship, containing brief, journalistic vignettes is being reproduced for distribution to all high schools in the state, thus providing young women with apprenticeship success stories replete with psychological satisfaction and fulfillment -- realistic and appealing enough to emulate.[15]

---

[13] See Appendix D: How to Become an Apprentice.

[14] See Appendix E: How About Women?

Beyond investigating the vocational guidance sources used throughout the state, the two project staff members regularly visited public high schools, seeking to motivate young women through presenting the facts vs. the myths of women's changing role in society. It was during such sessions that the project film, Never Underestimate the Power of a Woman, and raw economic statistics frequently met with flat, uninterested responses from most teenage girls. Their resistance to counter what they perceived to be society's expectations seemed to have been cultivated and reinforced to an impenetrable degree by the time they were seniors. Guidance counselors had virtually no printed material which would have led them to propose that girls seek careers in the trades. Girls had not had the same exposure to the industrial arts in junior high or middle school as boys who routinely were required to take them, and who without question would take them again in high school.

---

[15] See Appendix F: Earning and Learning: Wisconsin Women in Apprenticeship Excerpts.

The Department of Public Instruction has released the following statistics, reflecting greater state and federal financial support for vocational training and indicating the degree of participation of female students. General technical, industrial enrollments of young women in 103 high schools in the state have increased sixfold during the life of the project, compared with an also dramatic threefold increase of male enrollments. However, the continuing disparities between male and female enrollments are still dramatic when the participation is compared by percentages: in 1973, 98.5 % of the enrollees are males; 1.5%, females.

Table 5

Wisconsin Trade and Industrial Education Enrollment -- Grades 9-12*

1969-70

	Male		Female	
Drafting	1060	(98.1%)	20	(1.9%)
Electricity	692	(99.9%)	1	(0.1%)
Graphics	746	(98.0%)	15	(2.0%)
Woods	914	(99.1%)	8	(0.9%)
Metals	2166	(99.6%)	8	(0.4%)
Power Mechanics	1932	(99.6%)	7	(0.4%)
Aviation	15	(100.0%)	0	(0.0%)
Total	7525	(99.2%)	59	(0.8%)

1972-73

	Male		Female	
Drafting	2415	(95.9%)	102	(4.1%)
Electricity	2377	(99.8%)	5	(0.2%)
Graphics	3075	(96.1%)	125	(3.9%)
Woods	4089	(98.4%)	68	(1.6%)
Metals	6948	(99.4%)	42	(0.6%)
Power Mechanics	4870	(99.5%)	23	(0.5%)
Aviation	50	(92.6%)	4	(7.4%)
Total	23,754	(98.5%)	369	(1.5%)

* 103 of 429 Wisconsin high schools

Breaking the Boy's Tech Barrier

The project identified a major anachronism in the public schools where one entire high school was dedicated to providing technical training for boys only. The prestigious Milwaukee Boy's Technical High School in its total focus on male students -- in name, practice and intent -- excluding female participation, stood out as a glaring barrier to apprenticeship opportunities for young women in the state's most populous urban area. A personal inquiry on behalf of pre-apprenticeship training for girls by the project yielded an institutional resistance defending the status quo because a.) there were no washrooms for girls; b.) faculty could not teach mixed groups effectively; and c.) the boys' motivation and learning abilities would suffer.*

Through alliance with a co-operative guidance counselor, the project recommended testing the resistance with a qualified 8th grade female applicant who was primarily interested in pre-plumbing classes in mechanical drawing and welding. The school held true to its name by refusing to send an application to a female. The young woman and her family, members of the Mexican American community were readily discouraged and chose not to pursue the interest. However, women's groups, the National Organization of Women, AFL-CIO Women's Organization, the Governor's Commission on the Status of Women, the American Civil Liberties Union and a female counselor in the Milwaukee Spanish

---

* Informal survey conducted by Milwaukee NOW chapter.

Center acted in behalf of other potential applicants and their parents by filing a complaint with the Milwaukee School Board. The net effect of persistent demands in the face of obvious discrimination in a public facility was the "desexigration" and changing of the name of the school in September, 1972. Twelve young women were enrolled in the first year, taking advantage of the broad range of technical classes available only at that school. The school reports an anticipated 1973-74 enrollment of 150 females.

The Guidance Community

The project sponsors and staff believe they have gained a few committed allies among the state's guidance counselors, but their attempts at penetrating the fixed tracking assumptions of organized guidance counselors have been futile. Both state and national conferences (1970-1973) of organized guidance counselors have invited project speakers, yet have done little to promote interest or commitment among participants. "Symptomatic" of complacency or malaise in the guidance community is the diagnosis of the project in observing the sparce attendance at guidance workshop sessions labeled, "Women in Apprenticeship - A Way Out of the Job Ghetto." Social change within the public schools which would motivate females to prepare for changing economic roles must be supported and reinforced by the vocational guidance staffs. The options for females must be intentionally expanded beyond the traditional alternatives of either a college preparatory curriculum or home economics-secretarial preparation which lock young women into roles not always reflecting their interests and aptitudes, and certainly not representing their best economic interests.

Project Suggestions

The project has submitted recommendations to the effect:

1.) That changes be made in the standardized WISC cards, eliminating any sex designations for occupations. The change, requiring concentrated Wisconsin Department of Public Instruction attention, has been made.

2.) That public schools post apprenticeship information for both boys and girls. This has been done to the degree that the project itself has been the source of the materials.

3.) That a female be included among the all male guidance counseling staff of the State Department of Public Instruction. The Governor's Commission on the Status of Women has undertaken a close study of the policies and practices of that staff.

4.) That teachers and counselors be required to participate in human relations courses, which would include facts on the damaging effect of sex stereotyping, as well as practical suggestions for building positive self images. Such a human relations course has been developed in Madison as a pilot program. A state wide course offered by the University of Wisconsin Extension, "Sex Stereotyping in the Public Schools," was attended by 50 teachers in its first semester.

5.) That promotion of apprenticeship to both boys and girls at the high school level be a high priority within the DAT. Because of budget restrictions, the allocation of staff time during the project has permitted only token promotional efforts and participation in annual "Career Day" conferences in the high schools. In the Green Bay area a university student doing an independent project on affirmative action is co-operating with the DAT field representative in leading a series of workshops in the public schools to promote the greater understanding of apprenticeship training possibilities among females, their teachers and vocational counselors. The motivation of such a committed feminist is an ideal complement to the technical apprenticeship knowledge represented by most DAT staff members.

6.) That a project be conducted to train several open minded young women who know (or will learn) something about the real world of work; have them explore in further depth high school myths; give them funds to design and complete a professional survey of what (1) students, girls and boys, (2) teachers, and (3) counselors do and do not know about labor market limitations and opportunities. Use this information to design a film and accompanying course curriculum (or a series of videotapes that can be widely used on educational television) that can accurately dispel high school myths, fill information gaps, and portray attractive role-models for non-college bound girls.

7.) That a research and demonstration project be designed to place a researcher-observer in a cooperating school system to isolate, analyze and minimize factors and practices operating in elementary, junior high and high school that adversely affect the breadth of girls' vocational horizons and realization that the majority will need to prepare both for marriage and an extended period of paid employment.

WISCONSIN VOCATIONAL, TECHNICAL, ADULT EDUCATION SYSTEM

The state Vocational, Technical and Adult Education System (VTAE), a sister agency in fulfilling apprenticeship regulations, has been a vital contact throughout the state. Although providing apprenticeship related instruction is an obligation, and there is very little opportunity for that provision to be discriminatory, the VTAE also offers technical courses apart from apprenticeship, but which often are interpreted as being "pre-apprenticeship" in nature. It is through participation in such courses that individuals gain a competitive advantage over those having had no previous exposure to requisite trade skills.

Vocational System Surveys: 1970 and 1973 Enrollments of Women

A 1970 Women in Apprenticeship survey among vocational schools showed a low rate of female involvement in technical training, in that women were enrolled in graphic arts, mechanical design, mechanical drafting and other technical course at a rate of one female to each 7 males (296 females to 2,148 males). In 1973 an identical poll revealed an enrollment of females at an even more unfavorable rate of one to 13 (205 females to 2,695 males), indicated in the following table, with 19 schools represented in 1970 and 20 in 1973.[16]

---

[16] See Appendix G: VTAE Survey.

Table 6 Vocational School Enrollment: Technical and industrial classes

1970

	Male		Female	
Graphic Arts	142	(74.3%)*	49	(25.7%)
Mechanical Design	317	(96.9%)	10	(3.1%)
Mechanical Drafting	132	(89.8%)	15	(10.2%)
All Other	1557	(87.5%)	222	(12.5%)
Total	2148	(87.9%)	296	(12.1%)

1973

	Male		Female	
Graphic Arts	121	(89.0%)	15	(11.0%)
Mechanical Design	284	(98.6%)	4	(1.4%)
Mechanical Drafting	270	(96.1%)	11	(3.9%)
All Other	2020	(92.0%)	175	(8.0%)
Total	2695	(93.0%)	205	(7.0%)

* Percent in courses

There is some indication in both surveys that females did complete courses and became employed because they picked fields in which there was little social or traditional resistance -- primarily in the graphic arts. About 25% of the technical, industrial directors who responded to both surveys claimed that the main reason women were not enrolled in greater numbers is that they are unaware of technical and industrial opportunities and programs. Another 25% claimed that it is society's traditional view of females which discourages them from entering the technical and industrial fields even when they know about them.

The relationship to successful apprenticeship application and enrollment following vocational school training is not statistically clear where females have been involved. However, both the female carpenter and painter who have been accepted on Wisconsin construction Joint Apprenticeship Committee waiting lists in 1972 had had technical, preparatory courses at vocational schools before they applied for apprenticeships. Fifty-one percent of the females who became apprentices from 1970 to 1972 had some vocational school training beyond high school. According to Division of Apprenticeship and Training staff, males can claim some direct advantage to vocational courses as they have completed full time study and have later been accepted in apprenticeship programs, especially in the machinist and printing trades. However, the Barocci Study of the drop-out apprentice in Wisconsin revealed that only 5% of sample had vocational training before entering apprenticeship.[17] The project maintains that for women who have not had the same practical, prerequisite exposure to the trades in high school as males, the publicly supported vocational system provides the fullest range of opportunity for "compensatory" pre-apprenticeship trade skill training.

Attitudes and Practices

The state vocational system has responded variously to the project goals, since the regional autonomy among the 16 districts allows for overruling a state recommendation. The greatest resistance the project experienced was in securing related instruction for the newly apprenticeable occupations such as day care teacher, for which full time classroom training programs already existed in the vocational system.

The project methodology in eliciting the co-operation of vocational system staff members in the target area and state wide could have been enhanced had an ally who shared the Women in Apprenticeship Project goals been employed by the vocational administration. A cross-agency focus designed to meet individual institutional challenges could have eliminated much of the conflict brought to other organizations through single handed project intervention. One individual in the Division of Apprenticeship and Training who was to expose obstacles in an attempt to eliminate them could not function effectively when she was outside of the respective systems where problems existed. Rather then co-operate, a network of defenses was mounted, for instance, in the case of the vocational system and the Department of Health and Social Services, when the Women in Apprenticeship team of two sought to expand training possibilities through apprenticeship in the day care and health occupations.

---

[17] Barocci, p. 123.

In spite of project attempts to promote awareness of sex stereotyping through seminars and personal interviews with VTAE staff, there remains a stagnant reinforcement of traditional social-economic and sex roles in the promotional literature of the technical schools. The language and visual images in the publications of the Vocational, Technical and Adult Education system should be reviewed for obvious assumptions about male only participation in the apprenticeship trades. At the 1973 Wisconsin AFL-CIO Apprenticeship Conference, a speech-demonstration showing the range of apprenticeship activities available through the vocational system, made no reference to the participation of females outside of cosmetology. It is currently standard practice to portray, for example, auto mechanics, carpenters, small appliance repair personnel as males, thus, by suggestion, inhibiting female inquiry.

WISCONSIN STATE EMPLOYMENT SERVICE

Aptitude Tests

As part of the application procedure in the construction and industrial trades, aptitude tests based on existing employee responses are routinely administered by the Wisconsin State Employment Service (WSES). Theoretically, the tests do not measure specific knowledge, but both minorities and women who have not had pre-apprenticeship study or experience might interpret the tests as being biased in language and content. Because the test batteries are standardized, employers or Joint Apprenticeship Committees who use them as a screening device are reluctant to see them as discriminatory in effect. The periodic validation of such tests based on responses of representative employees is the responsibility of the WSES.

Because some minorities have had difficulty in passing the tests, the LEAP (Labor Education Advancement Program) outreach centers have acted as intensive preparatory agencies which concentrate on pre-apprenticeship skills, including specific preparation for aptitude tests. Women, as mentioned earlier, are not recruited by such outreach agencies, even though in many cases they experience the same deficiencies at the entry level as do minority males. The project did not attempt to alter the emphasis on, or use of the aptitude tests, but rather has focused on increasing job awareness and preparation in the high schools, and has, with little impact, insisted on the inclusion of females in the existing employment outreach programs.

Job Referrals

Another primary function of WSES is job referral, or matching applicants to suitable openings. Apprenticeship, because it implies that a training element is included, has not in the past been included among the possible options which a counselor could offer [illegible] client. The recorded placement quota system, including the reporting forms of WSES, do not acknowledge a category for the apprenticeship referral. Therefore, the counselor and agency receive no "credit" for apprenticeship placement. The project diagnosed the need for publicity and policy changes within this major conduit for the unemployed, so that women in the job market might routinely be informed of the apprenticeship trades. The project co-ordinator observed that females were being channeled by the employment service to the notoriously low paid jobs as waitress, clerical help or household employment. Occupations were classified into employers requests for "men's work" and "women's work," limiting inquiries by non-professional females to a narrow range of possibilities.

An immediate recommendation, which was fulfilled in 1971, was that a specialist in women's employment be hired to carry the staff development functions with respect to the employment needs and potentials of females to each regional office of WSES. Also, in an attempt to bridge the gap between agencies, the project representatives in Madison and Appleton made concerted efforts to build contacts and to establish harmony between DAT field staff and WSES district offices. A resulting focal point of co-operation throughout the state has been in the preparation of MDTA-JOPS contracts, for which WSES determines the eligibility status of trainees for program funds. Also, official Department of Industry, Labor and Human Relations policy having recently (January, 1973) eliminated sex designations in job titles, WSES no longer accepts job requests classified according to sex. Representative changes include:

Countergirl to counter helper
TV repairman to TV repairperson

Job Counselors

With its major role as an employment placement agency, the commitment of WSES to nondiscrimination practices toward females is essential. The Women's Specialist position which was created in 1971 no longer exists, although a Women's Affirmative Action officer position in the State Department of Personnel oversees the state's commitment to affirmative action for women. In addition, a women's employment advocate position within the Bureau of Community Services, Equal Rights Division of the Department of Industry, Labor and Human Relations provides the state with a permanent public information source for apprenticeship details, among other equal employment subjects of crucial interest to women. The employment agency has also designated a staff position in each of its district offices to concentrate on apprenticeship information and referrals.

The Women in Apprenticeship Project contributed to exposing the WSES deficiencies in apprenticeship information and specifically the women's employment through apprenticeship information. Although nominal adjustments are recognized, the attitudinal changes among employment counselors, which in turn could accelerate social change leading to freer job selection for women are gradually surfacing in some regional offices. Such attitudes, although difficult to measure, will change even less rapidly without legal and social pressures brought to bear by individual and organized females in their own behalf.

WSES Future

There continues to be a need for an independent, systematic review of employment service office and program procedure which could result in accelerated changes necessary for delivery of services to clients with as little built-in bureaucratic sex bias as possible. Some questions which remain to be answered are: 1.) How much and in what ways do services to employers and requirements of WSES staff to show quantity of placements, affect quality, non-stereotyped service to women applicants? 2.) What transferable technique and training materials could be inexpensively developed for WSES interviewing counselors, employment relations and administrative staff that could educate them to the changing pattern in women's lives and participation in the work force? Resulting recommendations and informational training kits could be utilized nationwide after the project's completion.

WORK INCENTIVE PROGRAM

The Wisconsin Work Incentive Program, administered variously as a unit within the Employment Service or as a counseling-employment placement service for Aid to Dependent Children welfare recipients, in goals and theory, has a complementary role to the Women in Apprenticeship Project. The advantages of WIN collaboration in the project goals are: a.) the specific placement function of WIN permits "job development" (which is not the apprenticeship agency's legal charge); b.) WIN programs are generally staffed to provide comprehensive social services as well as close personal guidance to an enrollee; and c.) the WIN program is able to offer tax credits and financial aid as incentives to prospective employers of enrollees.

Signs of Co-operation

The project staff members have shared apprenticeship information -- brochures, film and leads on employment and training opportunities with the WIN staff, particularly in the target area and in Madison. The WIN staff in the Fox River Valley made over 25 employment-training referrals to women resulting in apprenticeship placements. Given the natural relationship to the WIN program goals, the Wisconsin Women in Apprenticeship Project anticipated even greater mutual efforts than occurred in practice. WIN has been restricted in its administrative regulations demanding statistics which show on-the-job employment placement; apprenticeship as a specific category of employment training does not appear in the statistics. Also, since July, 1972, WIN has had a defined priority of placing unwed fathers who are AFDC recipients, thereby de-emphasizing the services to female heads of families.

Although the WIN offices in Madison and Appleton have been generally responsive to project suggestions and make frequent use of project literature and the film, Never Underestimate the Power of a Woman, their staff turnover has weakened the continuity in operations. Where WIN placements have included apprenticeable occupations, the project regrets the absence of inquiry into potential apprenticeship programs. For example, an individual who might have been placed as a carpenter's helper, could have been groomed to become a carpenter apprenticeship applicant. The July, 1972 Talmadge Amendments affecting WIN Program activities make such pre-apprenticeship preparation even more difficult, since WIN records must show monthly on-the-job training placements for 1/3 of its enrollees.

Toward Mutual Efforts

As the formal Women in Apprenticeship Project terminates, Wisconsin WIN and Division of Apprenticeship and Training administrators are designing a plan to allow for staff exchanges among counselors and field representatives to specifically eliminate occupational stereotyping by sex in either agency. The project recommends that a communication process be established between WIN and DAT offices throughout the state, whereby basic information could be exchanged monthly, with a mutual emphasis on the prospective apprenticeship placement of enrollees, whether male or female. It is inconceivable that should a proposed, female apprenticeship outreach project be created, that it be undertaken without close WIN Program collaboration in referring interested females.

EMPLOYERS NEED INCENTIVES

Again challenging the basic provisions of apprenticeship, the Barocci study of the drop-out, as well as the more general Farber Report and Purdue Studies, cite the continual cost to employers as a major deficiency of present apprenticeship practice.[18] A conservative estimate of the cost to an employer of training an apprentice in Wisconsin in the first year is $3,350, taking into account the salary paid while the apprentice is in class and the supervisory or journeyperson time invested in the apprentice.* It is clear that the apprenticeship employer assumes a good deal of risk, especially since the general drop-out rate of 50% represents a comparable 50% loss of the training cost to the employer.

The project interpreted its goals as being enhanced if apprenticeship employers could be motivated in a practical, financial way through a subsidy or tax credit. And lacking such incentive funds, the existence of Manpower Development and Training Funds (JOPS Options training program) was a carrot that the project quickly identified as being useful in the promotion of minority females. Even with its restrictions that at least half of the employee participants qualify under the federal criteria for being disadvantaged, the percentage of female trainees covered by Wisconsin JOPS contracts has increased from 10% in 1970 to 40% in 1973. Especially in the development of the two new apprenticeship programs, the JOPS funds have been a vital motivating factor, averaging payments to employers of $800.00 per apprentice.

---

[18] Barocci, p. 253

* Estimated at 1972 average apprenticeship wages.

Forty-six percent of those employers who had hired female apprentices during the life of the project received supportive funds through the MDTA/JOPS sources. Twenty-seven percent of the employers of female apprentices said that the availability of such funds was the direct enabling factor in their commitment to provide apprenticeship training. The project must necessarily emphasize the crucial need, where other incentives for employers to train females are lacking, for the continuation of the JOPS contract opportunity.

Given the ongoing expense of training, however, the Division of Apprenticeship and Training and the project collaborated in providing information to the State Legislature in support of tax credits for apprenticeship employers. The 1971 proposed legislation, which would have provided an income tax credit of $80.00 per month of approved apprenticeship training provided to the handicapped, minorities or women, failed to be introduced in the Wisconsin Legislature, and was also rejected at the Congressional Committee level. It has been demonstrated that some measure of training subsidy, whether in the form of JOPS monies or tax credits, serves as an incentive to hesitant, cost conscious employers to assume an increased utilization of skilled females, trained through apprenticeship. The project recommends continued efforts to gain additional sources of financial support for apprenticeship employers.

VETERANS' PREFERRED STATUS

The Viet Nam Era veterans, following publicity and special accomodations by the Veteran's Administration, became an unwitting obstacle to the acceptance of females in apprenticeship training positions. An analysis of the rationale for the existence of training benefits, including some JAC's awarding veteran's "preference points" in competition for apprenticeship positions and routinely providing veterans with maximum age waivers, is not warranted at this juncture in the project. However, the priorities set by government agencies and employers for the rapid reassimilation of veterans into the economy has, in documented instances, meant that higher paying apprenticeable positions are labeled "veterans only;" or that in competition for a single apprenticeship opening, a veteran takes easy preference over a non-veteran or female. It is true that such accomodations exist equally for female veterans, but their relatively insignificant percentage (2%) in society obviously translates into few, if any, apprenticeship applicants.

The project viewed its realistic intervention as suggesting the need for extending apprenticeship training benefits to the widows and wives of veterans, hoping thereby to motivate another group of women to participate in apprenticeship. Again, the project served as an informational source for the Governor's Commission on the Status of Women which made the specific recommendation to Congress that the training benefits provided to veterans also accrue to widows and wives of deceased or disabled veterans. The Commission has also consistently publicized the decreased opportunities for females when veterans or any group in society are singled out for special employment consideration.

The 1972 Veteran's Readjustment Assistance Act does provide for equal apprenticeship training benefits for wives and widows of veterans. However, it is too soon to note an observable relationship between that act and increased numbers of female apprentices in Wisconsin. There are no female veterans who have become apprentices, although a few participated in on-the-job training programs supervised by the Division of Apprenticeship and Training to become nurses' aides, and one to become a telephone company central office repairwoman.

DECLINE IN TOTAL ECONOMY - INCREASE IN PROJECT SCOPE

A pervasive, unforeseen barrier which affected the total project goals, activities and conclusions was the declining economy, which from 1970-1972 was at such a low level that apprenticeship enrollments dropped by 10% -- from 8,781 to 7,885 during 1970. By 1972, the decline was 15.4% of the 1970 enrollment. The grim apprenticeship market statistics contributed to an early project frustration with having little power to control or alter major economic impediments while attempting to meet project goals. In the first year of the project, the construction industry alone reported a decline of 18%, including massive lay-offs which found skilled journeypersons sharing the bench with a few patient apprentices. In the target area specifically, some apprenticeship waiting lists had as many as 100 individuals not yet placed. While the total state economy was stagnant or declining, the graphic arts showed a consistent demand for services and a slight (4%) growth in use of apprenticeship.

The project responded to the unfavorable hiring conditions with a realistic reordering of priorities and with a concentration of effort designed to yield some visible results. One tack was to ease up on goals for immediate employment of women in the less promising employment areas and to seek to upgrade, via apprenticeship, women in occupations where they were already employed, as described in Chapter 5.

Furthermore, the total advocacy of improved conditions to enhance the full utilization of female employees justifiably became a project priority. In many industrial plants, women had been limited in accruing job benefits, such as insurance coverage or seniority rights because of forced maternity retirement. The presumption of short range employability of women of child bearing age had eliminated them from being considered as apprentices. Working hand-in-hand with the Governor's Commission on the Status of Women, the project drafted a maternity leave resolution urging that pregnancy related absences, including childbirth, be interpreted as any other temporary disability and therefore have disability payments and job reinstatement guaranteed. The Department of Industry, Labor and Human Relations acted positively on the resolution in 1972 making it a part of the administration rules governing the State Fair Employment Practices Act.

The policy now has the effect of a departmental regulation, making a definite separation between "maternity leave" and "leave for child-rearing purposes." Wisconsin thus became the first state in the country to recognize maternity leave as a temporary disability of a medical nature, to be treated by employers as any other temporary disability. A formal Maternity Leave Project proposal was designed by the Women in Apprenticeship staff to investigate the impact on employed women and the actual financial implications to employers of enforcement of the policy. Funded in 1972 by the Manpower Administration, and conducted under the direction of the former Women in Apprenticeship project director, the study will conclude in March, 1974.

Other spin off projects conceived through the direct experience of the project director in promoting Women in Apprenticeship goals have been: a.) the systematized reevaluation of the skill complexity codes for female associated occupations in the Dictionary of Occupational Titles (1971-1972) and an Intergovernmental Personnel Act sponsored study to analyze the underutilization and career patterns of women in the Wisconsin State Civil Service. Both studies share the premise of the apprenticeship project that the economic contribution and skills of women have been unacknowledged -- underrated and underpaid.

While broadening the activities of the apprenticeship project to lay the groundwork for other studies, it was important to recognize that when aiming for equal apprenticeship openings and completions, that "equality between the sexes cannot be achieved by proclamation or decree, but only through a multitude of concrete steps, each of which may seem insignificant by itself, but all of which add up to the social blueprint for attaining the general goal."[19] While the project assumed a broader attack on the general employment picture for females, it gained a vitality which carried it beyond the apprenticeship domain, yet at the same time allowed it to affect apprenticeship issues.

---

[19] Alice S. Rossi, "Equality Between the Sexes: An Immodest Proposal," p. 646.

CHAPTER 4. INTERNAL BARRIERS: PROJECT IMPRESSIONS OF THE AMERICAN GIRL

The Problem
The Girls We Met
How They View the Trades
Age and Information Gaps

CHAPTER 4. INTERNAL BARRIERS: PROJECT IMPRESSIONS OF THE AMERICAN GIRL

"But no women ever apply," is the most nearly universal explanation for the absence of women in apprenticeship offered by employers, unions, and the Division of Apprenticeship and Training staff. While systematically exploring and exposing the institutional resistances to apprenticeship opportunities for women in the educational and employment systems, the project co-ordinator turned to the psychological barriers presented by women themselves, and summarized their state of mind while in high school.[20]

The Problem

> "At the bottom of the whole question of the employment of women, we should always come upon their inefficiency through want of education. Until we can get technical training for women equal to the apprenticeship that boys get, we shall be defeated. The women's want of training is so generally called incapacity."

So wrote Josephine Butler in her pamphlet, "Education and the Employment of Women," 1875. The ready, superficial answer of today would be that girls do receive an education that is almost identical to that of boys; that in many schools, they can opt for the technical training shop courses, and if they do not, it is a choice of their own making. Such a response, however, ignores the fact that most of a child's school education is basic and general, and not of a technical nature directly relevant to the world of work and that though the general curriculum may, on paper, appear deceptively similar for boys and for girls, the emotional, attitudinal and expectational framework within which it is given is fundamentally dissimilar.

---

[20] Norma Briggs, Excerpt from Women in Apprenticeship Quarterly Report, December, 1971.

Harriet Taylor Mill, in her essay on the enfranchisement of women, says, "We deny the right of any portion of the species to decide for another portion what is and what is not their proper sphere. The proper shpere for all human beings is the largest and highest which they are able to attain to. What this is cannot be ascertained, without complete liberty of choice.". Though we pay lip service to complete liberty of choice, it is evident that we do not, in fact, offer it. The growing girl learns through the media, family and peer expectations, school textbooks and procedures as to what is her proper sphere.

The Girls We Met

The ideal all-American girl is groomed to equate fulfillment with a happy marriage. The ideal marriage produces children. The girl sees from her textbooks that the ideal mother stays at home. If her own mother has paid employment, it is a circumstance of necessity, a compromise or failure in the older generation to be viewed as a falling away from the ideal in much the same manner as a divorce in the family. A wholesome girl starting out in life does not plan seriously for extended paid employment any more than she plans on a divorce.

Many non-college bound girls sit through project discussions on vocational choice in what they obviously hope are languorously sophisticated positions, stroking their hair or their light-colored, conspicuously consumable garments, trying hard, it seems, to appear as much like the beautiful people they see in advertisements as is possible. From conversations with them, one gathers that there is group pressure not to show enthusiasm or interest in either their current academic studies or their choice of work, once they leave school. If they must work, it will only be for a short while until they marry Mr. Right, so between now and then they will do something that has glamor. Jobs with glamor are those in the entertainment world, cosmetologist, possibly that of nurse, and being an executive secretary to some distant high-powered male figure.

A number of intelligent young women chafing in low-level clerical positions remember, with anger, that when they were in school, there seemed only two options open to them: college track or business. They chose business because their families could not afford college fees or because they were planning marriage. Business for girls seems to consist of typing and more typing, shorthand and more shorthand. It includes, also, such subjects as grooming, how to be a good secretary, bookkeeping and even how to supervise other office girls. It does not include the kind of courses which are considered appropriate for young men entering business as a career, such as administration and management. Technical and shop courses were offered in their schools, but they described them as being generally considered to be the preserve of boys, and any girl who entered them risked being considered eccentric and had to brave the smiles and snide remarks of her peers and teachers. Several have told of how they wanted to take technical courses and how they were discouraged or refused entry; many, now in their early twenties, feel they were led up the garden path; almost all say of the Women in Apprenticeship Project, "Go to it. Somebody has to tell them."

Some teachers, struggling with a bored and negative class of non-college bound girls have eagerly sought help from project staff in widening their students' vocational horizons, some even joyfully anticipate the shock value of what we have to say. Student reactions are interesting; a few girls in each class are obviously listening hard, and a few more seem to be digesting the information given, even though they **pretend** they are not affected. The majority are obviously astonished that apprenticeship could be suggested as a possible choice for women at all. They tend to deny that they personally will ever have to take seriously the world of work, but what is most disconcerting is their firm belief that their legal right to equal opportunity in employment will not be protected. "If there is a job in a gas station, you know the man will give it to a boy and not to one of us," and one session is not enough to sway them, even though we tell them of fair employment practice laws and the availability of the Equal Rights Division.

How They View the Trades

The majority of young women have confused femininity with their idea of romance and glamor, and being at the age when they date and are looking for a husband, are particularly ill-equipped to give any kind of serious consideration to a very large proportion of the traditionally apprenticeable occupations. It is easier for a young black man to defy tradition and see himself as becoming a skilled construction worker than for a young woman of any race. Becoming a sheet metal worker or a carpenter in no way casts aspersions on either the male's blackness or his maleness; to enter either trade is still considered by many young women and many blue collar workers to indicate that the woman is not truly feminine. Though a woman may not be less female because she does "man's work," she certainly incurs the risk of seeming less ladylike and less attractive and desirable, according to the stereotyped norms.

Being one of the first to cross the sex-barrier in employment takes the kind of courage with which not everyone - male or female - is endowed. It is not simply a matter of finding out whether or not you can do the job - being on trial in a highly visible-and often publicized situation - but sometimes, as with the longshoregirl or a woman who enters a construction trade, it means being prepared to cope with an all-male work/social situation, where evolved customs, language and habits have been predicated on a single sex grouping and with the individual reactions (hostile, protective, derisive, ribald, gentlemanly, derogatory -- rarely neutral) of the men whose group has been "invaded."

Various women have told us they would like to be a carpenter. cabinetmaker, painter-paperhanger, or electrician -- but they added hastily, "not in construction work." Most women are ignorant of what happens on a construction site, and most would have trouble identifying the various construction trades, let alone describing their functions. Construction sites, for good reasons of safety, are enclosed shielded areas which are entered only by those who have business there. The onlooker is kept at a distance and perceives little but generalized movement. Many young men who are recruited into the construction trades are, at the outset, scarcely more knowledgeable of the inner workings of construction than are most groups of women. It is a fair conjecture, at least, that ignorance is not the sole reason for women's reluctance to consider the idea of learning a trade on the construction site. The construction industry is, at present, an all-male club or fraternity, initiating only men as new members; and the barrier to women is not the difficult or dirty nature of some of the jobs, but the breaking of a taboo and the treading onto a territory that is the preserve of its male initiates. The literature of the women's liberation movement often portrays the hardhatted construction worker, grinning and wolf-whistling at the passing girls, as the archetypical "sexist" -- but to the girl of eighteen, who knows no more of abstract feminism, perhaps, than she does of sheet metal work, the wolf whistle is not a symbol but a reality.

Age and Information Gaps

In most cases, because apprenticeship is exempt from age discrimination rules, girls pass beyond the normal apprentice applicant's age before they are psychologically prepared to cross the sex barrier in employment. The majority of the women who have been enthusiastic at the idea of becoming apprentice applicants in trades traditionally filled by men have been in their 30's or college graduates in their late 20's who have realized how little is available to them in the job market today with a liberal arts degree. Yet, construction trade Joint Apprenticeship Committees have set an upper age limit for applicants of 24-27. The 1970 survey in the Fox River Valley of industrial and service trade apprenticeship training establishments showed that almost 80% trained youths between the ages of 18 and 24.

In recent years, colleges have accommodated to the changing patterns in women's lives and their need for education and employment training after having children. Apprenticeship trainers, on the other hand, tradition oriented, have yet to recognize that significant learning can occur beyond the age of 24 or 30.

At the present time, the majority of women re-entering the work force after having children are automatically precluded from learning a skill through apprenticeship, though (if they have the money) they are welcome to learn through college and full time vocational school courses. At a time when this nation is so concerned about the rise in the number of AFDC mothers, and is passing legislation propelling them into the labor market, it does not make sense to allow the continuation of out-moded rules that disqualify them from meaningful on-the-job apprenticeship opportunities.

Females are not only less likely than males to be told of apprenticeship when in school, to explore and practice skills leading to apprenticeable trades (in shop courses), and to be steered to industries where apprenticeship is non-existent or a rarity, but almost all miss the one major direct apprenticeship informational and promotional mailing that a high proportion of young men receive in their early twenties. Every young man leaving military service in Wisconsin -- just when he is wondering what he will settle on or train for -- is told about apprenticeship and on-the-job training agreements, and informed that he is eligible for monthly educational benefits if he registers in an approved program, in addition to his trainee wages. The effect of this incentive in recruitment of males to these programs is demonstrable: of the 7,560 total apprentices (male and female) in Wisconsin, December, 1971, 2,043 were receiving veterans educational benefits. All but 10 of the 992 registered on-the-job trainees for that month were veterans. And, in mid-1973, one-half of the 7,600 registered apprentices are Viet Nam era veterans.

There is no easy answer to the resistance offered by society's pressures and by the female herself. Although the trends cited above are not totally reversed or neutralized in 1973, the numbers of female applicants for apprenticeship in the non-traditional fields during the last six months of the project (January-June, 1973) has accelerated, (along with a generally favorable hiring economy) so that there are now pioneer females in painting-decorating; plumbing; metal engraving; tool-die making; and knitter mechanic apprenticeships. As the oddity factor associated with women in the trades diminishes, particularly in the attitudes of parents, teachers, and employers, we can reasonably expect that more young women will be prepared to ignore outdated stigmas and pursue apprenticeship vocational interests which previously have been outside the sphere of social acceptance.

CHAPTER 5. NEW APPRENTICESHIPS IN DAY CARE AND THE HEALTH OCCUPATIONS

Criteria for New Apprenticeships

Background

Dictionary of Occupational Titles Skill Codes Challenged

Methodology for Stabilizing Apprenticeship in Day Care

Employers Subsidized and Organized

Related Problems and Related Agencies

Creating a Journeyperson Skill Level

Co-ordination with the National Child Development Associate

Possible Expansion

Chronology

Health Occupations

CHAPTER 5. NEW APPRENTICESHIPS IN DAY CARE AND THE HEALTH OCCUPATIONS

Criteria for New Apprenticeships

The decision to expand the project design to confer "apprenticeability" on selected female dominated skilled occupations was a studied choice on the part of the Women in Apprenticeship staff and the DAT. In 1970, with a dramatic decline in apprenticeship enrollment, an attempt by the project to inject a growth factor in the form of new programs was readily justified. Even more important to project goals, the question was posed as to whether establishing apprenticeships in "traditionally women's" occupations would more firmly link women and apprenticeship as acceptable and "normal" in the public mind. Hopefully, such an association would facilitate the eventual crossover of more women into apprenticeable occupations less familiar to them.

A key consideration for the DAT in the expansion venture was in the selection of occupations where the pitfalls of earlier attempts, apart from the Women in Apprenticeship Project, at introducing the apprenticeship system did not exist. For example, a conflict of interest with apprenticeship training is implied where a union might choose to prevent the influx of more workers via apprenticeship, or where professionals, having invested time and money in their own training, protect the "prestige" of their positions by excluding apprenticeship. The project had already isolated inadequate child care facilities as a major obstacle to the wider integration of women into the work force. Therefore, the day care industry, providing a vital service to working women, and meeting the criteria of not having either an established professional organization or a labor union related to it, was chosen as an area of apprenticeship expansion.

The health occupations -- homemaker home health aide, medical records technician, rehabilitation and X-ray technician -- although not totally free from interest groups, also presented realistic potential for adopting apprenticeship training, where benefits accruing to women, both as workers and as consumers, complemented the project goals. The "upgrading" of these occupations, increasing the available training and consequently affecting increases in salary for trainees, were the reasonable expectations of the project. The underlying assumption that the apprenticeship system has been under-utilized in occupations where females dominate further motivated the project, with Division of Apprenticeship and Training support, to engage in the day care and health occupations ventures.

Wisconsin's basic requirements for apprenticeship recognition are: a.) that the occupation have definable skills which can be translated into a series of practical work processes to be mastered, and which are founded on a curriculum of related theoretical instruction, and; b.) that those necessary skills must have industry wide acceptance. It was easily ascertained through consultation with the day care licensing agency, the State Department of Health and Social Services, that, although there were several styles of early childhood programs being conducted in the state, enough common knowledge - both in theory and practice - existed in the day care industry to permit collaboration on an apprenticeship training program.

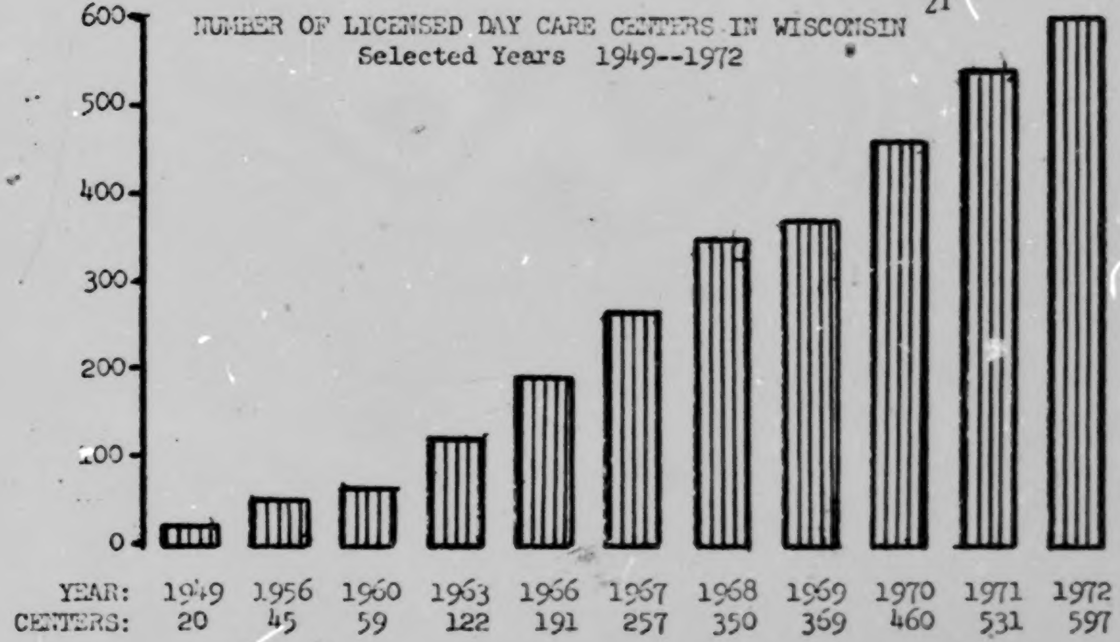
Background

Preliminary studies of day care in the state in 1970 showed 460 licensed centers, employing 1,600 staff members, 99% of whom were women. National surveys of the day care needs of working families projected an increase in demand for services at a rate far beyond the capacity of existing agencies to train additional staff. Women's Bureau statistics reveal that in 1971 one-third of all working mothers had preschool age children, and by 1980 the number of working mothers of preschool children is expected to increase by over 1 1/2 million. If Federal Interagency Standards* for day care centers were followed nationally, 35,000 more trained personnel would be required immediately. The growth of day care services in Wisconsin showed a sevenfold increase in 10 years -- 460 centers in 1970 as compared with only 59 in 1960.

---

* Used to determine eligibility of a program for Title IV A (1968 Social Security Amendments) funding.

Table 7



NUMBER OF LICENSED DAY CARE CENTERS IN WISCONSIN[21]
Selected Years 1949--1972

Among other child care advocates, the Women's Bureau of the Department of Labor and the Department of Health, Education and Welfare have publicized the facts dramatizing increased day care needs, while Congressional leaders have drafted proposed legislation designed to meet the requirements of middle and low income working families for quality child care. In Wisconsin, the availability of Title IV A (1968 Social Security Amendments) funds began in 1970 to inject supportive dollars into day care programs in Dane and Milwaukee counties. Taking these trends into consideration, the project coordinator made a positive assessment of the growth potential of the day care industry in Wisconsin. The practical demands for day care, reflecting stability in the industry, was an important consideration in the DAT decision to develop an apprenticeship program in that field.

---

[21] Wisconsin Department of Health and Social Services, Division of Family Services graph.

Dictionary of Occupational Titles Skill Codes Challenged

The other essential analysis provided by the project was in justifying among apprenticeship officials the degree of training and skill required to assume the day care teacher position, thus allowing the trade to be deemed "apprenticeable." The relatively minor value traditionally assigned to the skills associated with the education and care of the preschool children is reflected in the low *Dictionary of Occupational Titles* (DOT) skill complexity code for child care related occupations (kindergartner; nursery school teacher). Confirming the disbelief of some apprenticeship and vocational system administrators that day care could ever be recognized as apprenticeable, the *DOT* skill complexity code assigned to day care was found to be *878*. Each digit represents the degree of skill which the job requires in the areas of data, people, things, with *8* being equivalent to "no significant function." Because of her own previous experience as a director of a nursery school, the project director was able to see beyond the implications of the numerical code, and after acquiring basic training in *DOT* theory, she developed a convincing rationale, including current job information, to warrent a temporary change in the day care code to T 228.

The widespread use of the DOT by governmental agencies in organizing the world of work and the consequent suspected injustices to nearly 40% of the state's work force -- females in the service occupations -- surfaced by chance when the project director examined the formula for determining Manpower Development Training Act funding for apprenticeship and on-the-job training grants. Using the prescribed digits in the original DOT code to plan for day care apprenticeship training funding, the formula reflected such a low skill complexity that training funds could be offered for no more than 4 weeks. The changed code, giving a more realistic numerical rating, allows for 44 weeks of reimbursed training. A closer look at the DOT skill quotients of "traditionally female" occupations created a major concern among project sponsors when there appeared to be a definite correlation between low skill codes and other female dominated occupations.

To attack the total issue at its roots, the project designed a proposal which would analyze the coding of those service occupations associated with health care; child care; and food preparation. Currently sponsored by the U.S. Department of Labor, the Wisconsin based survey of DOT reclassifications is to report its observations and conclusions by September, 1973. It is not possible in this report to detail the job analysis schedules which acknowledge those skills usually associated with the home, and consequently, with females, which the Dictionary of Occupational Titles has traditionally omitted. In summary, Day Care Teacher, once it had been assigned a numerical description which takes it beyond the equivalent skill level of "parking lot or washroom attendant" (from 878 to T 228) can be viewed nationally as a skilled, and therefore, apprenticeable trade, qualifying it for Jobs Options training funds.

Methodology for Stabilizing Apprenticeship in Day Care

Beyond the recognition by the DAT and the agreement of employers to train skilled staff via apprenticeship, the ideal functioning of a state-wide apprenticeship program in any occupation relies on: a.) the willingness of an industry to accept and utilize the concept of practical on-the-job training combined with theoretical related instruction as a major mode of maintaining a supply of skilled workers; b.) the acceptance and co-operation of related state agencies: in the case of day care, the licensing agency -- the Department of Health and Social Services, and the source of related instruction -- the Vocational System; c.) the organization of a State Apprenticeship Advisory Committee to guide in the development of standards for operation; and d.) the participation of local apprenticeship advisory committees wherever apprentices are trained.

Employers Subsidized and Organized

A preliminary investigation of the staff training practices of day care centers in the target area and in Madison indicated that several, including both private and publicly sponsored employers, had a dual commitment to providing quality child care and to developing career ladders for staff members. Therefore, the concept of apprenticeship could be harmonized with the existing and continual in-service training commitments. The project concentrated its persuasion efforts among key employers who could form a core of apprenticeship leadership for the industry. But more than persuasion of apprenticeship's merits and potential contribution to the day care industry was required to extract owner-provider commitments to a formal apprenticeship program.

As a service occupation trapped by society's conflicting values which sometimes espouse a deep concern for high quality, comprehensive child care, yet offer no more, and often less than, subsistance monetary rewards in exchange for that care, day care centers could not afford the apprenticeship financial obligations of periodic salary increments and payment of apprentice and substitute workers' wages during related instruction. Even with beginning wages ranging from as low as $1.60 to $2.00 for an inexperienced worker, without a subsidy, day care providers simply could not be burdened with additional training costs. Program start up funds provided by the Manpower Development and Training Act

(JOPS contracts in Wisconsin) averaging $800.00 for each apprentice, along with assurances of relevant, related instruction provided under apprenticeship law by the Vocational, Technical and Adult Education System, were strong motivating factors which project staff and individual DAT field representatives conveyed to prospective employer participants.

Rather than invite groups of interested individuals and agencies together for information disseminating sessions, project staff, with the technical assistance of DAT field representatives, made personal and separate contacts with day care providers, State Health and Social Services representatives and Vocational School apprenticeship staff members across the state to lay the groundwork for a self-perpetuating apprenticeship program. Each contact predictably responded with a measure of doubt and skepticism, which in a group setting could have easily inhibited the emergence of enthusiasm for this "new idea." Lack of familiarity with apprenticeship, including the terminology of the system -- "indenture," "industry" -- and association in the public mind with union control and exclusivity, together created widely expressed anxieties among employers.

However, the patterns of centers hiring and providing in-service training for individuals with demonstrated child care skills as opposed to four year academic degreed individuals, indicated the industry's preference for a competency based style of training -- precisely what apprenticeship claims to be. The appeal of an industry based and controlled training system combined with the immediate availability of JOPS training funds far outweighed any skepticism of several providers who eventually created the core of a state apprenticeship advisory committee. The first employer of apprentices formulated a list of on-the-job work processes to be learned during a two year apprenticeship, and in five regions of the state, providers petitioned the Vocational School for apprenticeship related instruction classes to correspond with the on-the-job training. The project contributed personal consultation as well as promotional literature to help stabilize the program.[22]

Related Problems and Related Agencies

Unforeseen resistances became a.) the incapacity of the vocational system to provide instruction for day care apprentices as they were indentured; b.) the priority of the State Department of Health and Social Services to be concerned first with licensing and secondly with consultation and training in centers; and c.) the expressed opinion of the Dean of the University of Wisconsin Home Management School on behalf of unemployed Child Development baccalaureate degree graduates that a new training program would be impractical. Underlying the resistances was the question of the "appropriateness" of apprenticeship (largely associated with male trade training) to the human product orientation implied in day care staff training, and the view that apprenticeship would be an unnecessary competitor in educating more child care personnel then the market could absorb. It was the industry -- day care providers, including Headstart, Community Action day care centers and private profit making and non-profit agencies -- which prevailed because of apprenticeship's potential responsiveness to their day to day staff development concerns.

---

[22] See Appendix H: News in Day Care Apprenticeship.

The strength of the day care industry as expressed through representative participation on local and state apprenticeship advisory committees resulted in co-operation and allocation of staff time and resources to the apprenticeship program by related agencies. Within eight months, the Vocational System called together consultants to design a competency based curriculum of day care related instruction. The Department of Health and Social Services participated by a.) accepting the apprenticeship training as fulfilling staff training licensing requirements for day care centers; and b.) providing consultants to local and state apprenticeship advisory committees. The University of Wisconsin Home Management School has taken no formal position (beyond initial fear of the job market diminishing for its graduates), but former and continuing University staff members have given support and consultation to apprenticeship committees and individual employers on request.

Creating a Journeyperson Skill Level

The DAT has acknowledged that in most of the day care centers where apprentices were initially employed, a training gap was obvious between the designated journeypersons who functioned as "person in primary responsibility" in the classroom with children, yet who had never before had to convey their skills to another adult -- the day care apprentice. The DAT sponsored a pilot course, the "Journeyperson Upgrade," through which 16 individual journeypersons received an orientation to the apprenticeship curriculum, gained practice in observation and evaluation methods to be used in the on-the-job portion of the apprenticeship, and generally became more confident in their training roles.

The Community Co-ordinated Child Care (4C) organization in Dane County developed the journeyperson upgrade curriculum as a package which could be modified, individualized and provided elsewhere in the state. Having strengthened the "journeyperson" status of the 16 participants, the course ideally should be offered in the major day care apprenticeship centers in the state -- Milwaukee, Appleton, Beloit-Janesville, Superior-Ashland, for the purpose of upgrading supervisory personnel, and thereby improving the quality of training for the current and future apprentices.

To that end, the project designed a proposal for funding to train more journeypersons who could provide on-the-job instruction to apprentices. A recent evaluation of the progress of the nearly 80 day care apprentices in the state by their vocational school instructor further re-emphasized the need for more co-ordination among the journeyperson, the apprentice and the instructor -- a function which the journeyperson upgrade program helped to fulfill. The apprenticeship instructors and local advisory committees are unanimous in their endorsement of "Journeyperson Upgrade" to improve the quality of the on-the-job training in their respective regions.

The DAT Journeyperson Upgrade proposal should be resumbitted to the Manpower Administration in light of a.) the obvious relationship between expanded quality day care services and expanded, stable apprenticeship (or other) employment of women; b.) the endorsement by the industry of the pilot Journeyperson Upgrade program and subsequent request by advisory committees for its continuation throughout the state; c.) the innovative use of the apprenticeship mode of training represented in the program; and d.) national emphasis on training more day care personnel to meet the Child Development Associate criteria, as established by the Office of Child Development.

Co-ordination with the National Child Development Associate

The announcement in 1971 by the Office of Child Development of its intent to design competency based training programs for day care personnel -- the Child Development Associate -- came several months after the inception of the Wisconsin Apprenticeship program for day care staff. There appear to be no conflicts in the required competencies of the Child Development Associate and the Wisconsin Day Care

Teacher Apprenticeship, although refinements of both statements are in process. The project and the DAT have supported attempts in Wisconsin to co-ordinate, through membership in a quasi child development consortium, the compatibility of the Child Development Associate concept with the Day Care Apprenticeship and other competency based programs.

Possible Expansion

An additional project recommendation to meet the growing need for quality child care for working families is that in-home or family day care services be formally expanded by use of apprenticeship. The 1973 Economic Report of the President indicates that 78% of working women with pre-school children prefer and use in-home child care services; the 1972 survey of women in Wisconsin Apprenticeship shows that 97% of those women who required child care in order to work relied on in-home or family day care facilities. Utilizing the existing day care teacher apprenticeship program to improve the quality of care offered and to elevate the employment status of the providers of care is a realistic goal. Such an expansion of the existing group care apprenticeship program requires the endorsement of the DAT, the Vocational System and the day care center operators, who would act as employer-supervisors in systems of "satellite homes" related to larger training facilities.

Chronology

A summary outline of the progress of the day care apprenticeship program to date follows:

1. September, 1970. The idea to make day care teaching an apprenticeable occupation was expressed in the Wisconsin Women in Apprenticeship Project quarterly report.
2. April, 1971. Official application through the Wisconsin Women in Apprenticeship Project led to a Dictionary of Occupational Titles change in numerical rating for day care teacher from 878 to T 228. This change gave recognition to the skill level involved in teaching pre-school children, thus justifying an apprenticeship term and the use of MDTA-JOPS funds.
3. July, 1971. Child Development, Inc., in Madison submitted "Work processes to be completed by apprentices," and indentured the first six apprentices.
4. October, 1971. The Office of Child Development, through Director Edward Ziegler, announced the concept of a competency based child care worker -- the Child Development Associate -- to be defined and translated into programs receiving federal funds in the future.

5. January, 1972. The state Vocational, Technical and Adult Education Board published the first edition of the Day Care Teacher Apprenticeship Curriculum.
6. February, 1972. The State Day Care Teacher Advisory Committee defined journeyperson status and the role of journeyperson for the day care industry.
7. July, 1972. The first two apprentices, having begun with advanced credits, completed the apprenticeship program.
8. September, 1972. Dane County Community Co-ordinated Child Care and the Division of Apprenticeship and Training began the first "Journeyperson Upgrade Program," with the one training director and sixteen participants.
9. November, 1972. "The Wisconsin Way - Training Day Care Teachers through Apprenticeship," is presented at the National Association for the Education of Young Children Convention in Atlanta, Georgia.
10. June, 1973. The State Day Care Apprenticeship Advisory Committee and the Division of Apprenticeship and Training agree on statewide standards regulating the program.
11. June, 1973. Over 100 individuals have been indentured as day care apprentices. Since July, 1971, 10 have completed the program; 80 are continuing.

HEALTH OCCUPATIONS

Simultaneous with the development of the training program in day care, a second, relatively new concept in the health service occupations -- the homemaker home health aide -- was introduced and met the DAT criteria to become an apprenticeable occupation. Through preliminary studies, the project determined that the occupation provides an avenue for skill upgrading for women and that the apprenticeship mode of training could mesh with the proposed "career ladder" concept of the National Homemaker Council. In addition, there were reasonable expectations that the service would grow, especially in relation to home health care for former hospital patients. The project co-ordinator designed a three year training program by translating the homemaker home health aide training -- practical work assignments supported by theoretical related instruction -- as defined by the National Homemaker Council, into apprenticeship's "Work processes to be learned" (an integral part of every indenture).

The need to develop a Dictionary of Occupational Titles skill complexity code for the homemaker home health aide position was also assumed by the project co-ordinator. Since the occupation is a relatively recent concept, designed to function as part of a home health care team, the 1965 edition of the DOT did not include it. The temporary assigned code of T 228 permitted expenditures of JOPS (MDTA) funds for each homemaker home health aide apprentice.

In the target area, a private homemaker home health service agency developed a complementary course of related instruction to be provided by its own staff or by consultants. A Milwaukee agency dealing primarily with the needs of the handicapped similarly designed a course to comply with its training needs for the homemaker home health aide apprenticeship. Thirty women, 90% of whom qualify under federal criteria as being disadvantaged, have become homemaker home health aide apprentices in the target area and in Milwaukee. Since the occupation itself is not yet established statewide, the need for project and DAT promotion aiming at industry wide acceptance, creation of state and local advisory committees, and co-ordination with licensing agencies has been minimal. With employers able to provide both on-the-job training and related instruction, established related training through the Vocational System has not been necessary.

The target area staff representative also visited health industry administrators to introduce the formalized concept of on-the-job training combined with theoretical related instruction for dietetic cooks. She successfully indentured 14 health facilities cooks and 8 medical records, rehabilitation and pharmacy technicians. The DAT administrator and the social service employers of apprentices expressed optimism that apprenticeship possibilities in these occupations, where there is a need for formalizing training and upgrading, were limitless. The apprenticeship system could be especially useful in those health industry occupations where federal staff training requirements for reimbursement of the cost of care are of increasing importance.

CHAPTER 6. THE FEMALE APPRENTICE

I. RATIONALE: WOMEN IN APPRENTICESHIP SURVEY

II. SURVEY POPULATION

III. DATA COLLECTION

IV. DROP-OUT RATES

V. OBSERVATIONS

- Motivation
- Age - The Female Apprentice
- Education of Female Apprentices
- Marital Status
- Public Financial Assistance: Heads of Households
- Wages
- Quality of Training
- Physical Aspects of Work
- Day Care Needs
- The Drop-out : A Summary

EMPLOYERS OF WOMEN APPRENTICES SURVEY

- The Drop-out: Employer Responses
- Conclusions: Women Apprentices and Their Employers

CHAPTER 6. THE FEMALE APPRENTICE

I. RATIONALE: WOMEN IN APPRENTICESHIP SURVEY

The most extensive survey effort of the project has been of the females who entered apprenticeship programs during the first two years of the project (July 1, 1970--June 30, 1972). The study was designed to reveal an employment profile of both the continuing or graduate apprentice and the drop-out.[23] We expected to find that the continuing apprentice had favorable work-training conditions, such as adequate salary as perceived by the apprentice; satisfactory related instruction; good employer-apprentice relationship; higher motivation, as measured by initial expectations, and commitment to achieve trade skills and certification.

For the drop-out, the questions of quality of the work-training experience; salary; health; compatibility with the employer and co-workers; child care and transportation problems were the key areas where we expected to find insights into the reasons why women have left apprenticeship training. The questionnaire was designed to extract the total participant perceptions of their employment and training experience in apprenticeship as well as to highlight any differences between drop-outs and those who were continuing or graduate apprentices.

---

[23] See Appendix I: Wisconsin Women in Apprenticeship Survey, 1972.

II. SURVEY POPULATION

The intent of the study was to survey all women who had entered apprenticeships during the first two years of the project (July 1, 1970--June 30, 1972). A state of flux in the Division of Apprenticeship and Training recordkeeping system caused some difficulty in determining the final sample for the survey. Some apprentices who had enrolled before June 30, 1972 were not yet recorded on the computer terminal by August 1972, when we began to formulate the survey sample. Although the pretest and actual survey were completed by December 1972, a check of women listed on the computer records as having entered apprenticeship in the period in question yielded 54 new names. Of those additional names, we selected as additions to the sample only the women who represented employment in non-traditional female occupations as opposed to the already well-represented day care teacher and homemaker home health aide apprenticeships. With a total sample of 187, including 12 cosmetologists, we acquired data from 159, representing a response rate of 85%. The cosmetology apprentices represent 10% of the women who were indentured in that field during the project. Those who were not reached could not be traced through several changes in address, lack of telephone facilities, or an inability to trace the employer.

The Wisconsin Women in Apprenticeship Project in no way concentrated on particular economic or racial groups, either in isolating obstacles, or in carrying out demonstration aspects. It may be of interest, however, to note the following ethnic breakdown of the survey population:

Table 8

	Wisconsin Women in Apprenticeship Participants - 1970 - 1972		Wisconsin Total Population Census - 1970	
American Indian	4	(2%)	18,872	(0.4%)
Black	24	(13%)	125,772	(2.9%)
Hispano-American	2	(1%)	41,065	(0.9%)
White	157	(84%)	4,162,860	(95.5%)
Other non-white	0	(0%)		(0.3%)
Total	187	(100%)	4,359,680	(100.0%)

The 25 occupations represented in the Women in Apprenticeship survey are:

- Public Health Aide
- Manager
- Day Care Teacher
- Homemaker Home Health Aide
- Police Detective
- Cosmetology
- Central Office Repairwoman
- Draftswoman
- Radio TV Mechanic
- Barber
- Layout Stripper
- Lithographic Stripper
- Printer Operator
- Process Artist
- Rubber Engraver
- Weekly Newsprinter
- Pharmacy Technician
- Medical Records Technician
- Surface Technician
- Second Class Engineer

- Cook
- Health Care Facilities Cook
- Silk Screen Cutter
- Nursing Assistant
- Meat Cutter

The 15 occupations of the drop-outs were:

- Public Health Aide
- Manager
- Day Care Teacher
- Homemaker Home Health Aide
- Cosmetology
- Draftswoman
- Radio TV Mechanic
- Nursing Assistant
- Barber
- Cook
- Health Care Facilities Cook
- Layout Stripper
- Lithographic Stripper
- Process Artist
- Second Class Engineer

III. DATA COLLECTION

Under the direction of the project coordinator, a team of interviewers from the University of Wisconsin Survey Research Laboratory gathered the data during October-November 1972. In December when a computer check on the validity of the sample was run, 16 additional females were added to the sample giving a possible total of 187 respondents, 159 of whom completed interviews. The resulting response rate was 85%.

The questionnaire responses were coded and keypunched by the end of January 1973, also under the direction of the project coordinator. Further cross tabulations of information to determine the specific characteristics of the drop-out were programmed using the University of Wisconsin 1108 Computer Facility and the University of Wisconsin data analysis computer program, STATJOB. Other programming concerns the isolated responses of those females who were employed in the newly apprenticeable occupations as day care teacher or homemaker home health aide apprentices, cross tabulated with variables such as age, reasons for beginning apprenticeship, reasons given for dropping, if appropriate, as well as all questions on the quality of training and relationship with the DAT. All tables are designed to show the responses of the day care-homemaker home health aide apprentices separate from the total respondent figures.

IV. DROP-OUT RATES

Of the 187 sample population, 11 participants graduated, with 38 showing cancellation or suspension. The female drop-out rate is calculated at 24%. According to a recent Wisconsin-based study of the apprenticeship drop-out by Thomas Barocci, 50% constitutes the drop-out rate in general for all apprenticeships.[24] His sample included a 90% male and 10% female (40 of 42 of whom were cosmetologists) breakdown and he was able to make a clear comparison between drop-out and graduate apprentices.

---

[24] Thomas A. Barocci, The Drop-out and the Wisconsin Apprenticeship Program: A Descriptive and Econometric Analysis, the Industrial Relations Research Institute, the University of Wisconsin, Madison, Wisconsin, 1972, p. 113.

The Barocci statistic does not include apprentices who were continuing. That is, he studied only drop-outs compared with graduates, whereas the Women in Apprenticeship sample shows 76% to be continuing or graduate female apprentices, and 24% to be drop-outs.

Because the samples and their time spans in apprenticeships are not comparable, we admittedly could not make a precise comparison with his study. However, another calculation of the male drop-out rate, based on Wisconsin construction and manufacturing trade figures for 1970-1972, shows the percentage of drop-outs to be 44%, as opposed to 56% continuing or graduate apprentices.[25] Therefore, using both methods of calculation, (male drop-out vs. completers and male drop-out vs. continuing or graduate) we found the figure to be about double that of the 24% drop-out rate determined in the Wisconsin Women in Apprenticeship study.

All but two of the 42 women apprentices in the Barocci study represent the cosmetology trade where there have been both notably high drop-out rates and a dramatic decrease in total enrollments during the Women in Apprenticeship study. Because apprenticeship in cosmetology was an already well-established training program, the project had not focused either on moving more women into the program or on investigating the reasons for the shift of trainees from apprenticeship to private beauty school training.* For purposes of presenting the full range of occupations in which females have become apprentices, we attempted to reach 10% of the cosmetologists. Of the 12 respondent cosmetology apprentices, 5 were drop-outs and 7 were either graduate or continuing apprentices. The small sample from the cosmetology program in itself represents a higher than average drop-out rate for women at 42%.

---

[25] See Appendix J: Method of Calculation of Male Drop-out Rate.

V. OBSERVATIONS

We are satisfied that with an 85% response rate, we have a valid reflection of the experience of the Wisconsin female apprentices during the first two years of the Wisconsin Women in Apprenticeship Project (1970-1972). For the purposes of reporting a general overview of the work and related instruction experience of all female apprentices, we have combined the responses of completers, continuing apprentices and drop-outs. All tables indicate the raw number and percentage responses of the drop-out, the continuing or graduate, and the total of those two categories. A separate tabulation of the responses of the newly apprenticeable occupations, day care teacher and homemaker home health aide is also included in each table.

---

* Before terminating the project, we collaborated in a survey to determine the reasons for the decreased enrollments and high drop-out rates in cosmetology apprenticeships. The fact finding interviews with employers and apprentices will continue beyond the project term.

Although our original concern was to characterize the drop-out so that remedial action could be set in motion, the explanation of why such a high percentage (76%) of participant apprentices continued provides more evidence with which to dispel the myth of "high female job turnover." The survey, in effect, supports the original hypothesis of the project that women are no greater risks than males in terms of absenteeism, retention rates, punctuality and attendance at work and related instruction. And, if we can accept the Barocci 50% drop-out figure for the total apprenticeship population, the female drop-out record is significantly lower at 24%.

Although when measured by the quality of training (e.g., 27% had no journeyperson working directly with them; 20% received no related instruction) and the reported wage rates, their apprenticeship positions are not ideal, we find 99% (157) of the total group answering that the apprenticeship position was personally rewarding to them. And a total of 84% said they believed that the public highly or somewhat respects apprenticeship training. This response, we believe, is based on what the apprentices believe to be traditional, or male dominated programs. That their degree of satisfaction with the work itself is high is significant, when contrasted with the general findings of the 1972 President's Task Force Study on Labor which reports most working people to be disenchanted with their jobs.

Motivation

"Women are not serious about their jobs," hopefully is a myth of the past. National statistics reported by the U. S. Department of Labor, Women's Bureau, indicate that 50% of women who work do so for economic reasons. The Women in Apprenticeship survey showed that 59% (93) of the apprentices chose apprenticeship because it was an opportunity to learn trade skills and another 11% specifically sought a recognized certificate. The range of motivating factors are relatively the same for all apprentices, whether they dropped out, continued or were associated with traditionally female occupations. The satisfaction derived from the work obviously is another strong incentive in itself in that 99% (157) of all respondents said they found the work to be personally rewarding. Personal fulfillment, combined with the acquisition of practical and theoretical training in trade skills, rather than temporary seeking after pin money, is the factual picture of women in apprenticeship. Anticipated financial security did play the main part in leading to apprenticeship employment for 15% of the respondents, a point reflecting confidence in their employers, their chosen occupations, and in the benefits of the apprenticeship system.

All categories of women apprentices polled reflected high initial expectations for completing their apprenticeships. Slightly fewer of the drop-outs (84%), as opposed to those still in, or having graduated from programs (95%) said they expected to complete.

It is in the response of the drop-outs who did not expect to finish that we find a few women (6 of the 159 respondents) whose personal lives were in a state of flux, who were working in apprenticeship only until they moved or could find jobs which paid better wages.

Table 9 - What was the one main factor that led you to become an apprentice?

	Drop-out		Graduate or Continuing		Total		Homemaker Home Health Aide and Day Care	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Financial Security	6	15.8	17	14.0	24	14.5	13	14.6
Interest in Trade Skills	21	55.3	72	59.5	93	58.5	46	51.7
Someone Else Though it Was Good	1	2.6	6	5.0	7	4.4	5	5.6
Mobility	0		0		0		0	
Recognized Certificate	4	10.5	14	11.6	18	11.3	14	15.7
Interest in Children	1	2.6	5	4.1	6	3.8	6	6.7
Required for Occupation	2	5.3	2	1.7	4	2.5	3	3.4
Sounded Like Good Idea	1	2.6	2	1.7	3	1.9	0	
Other	2	5.3	0		2	1.3	1	1.1
Not Ascertained	0		3	2.5	3	1.9	1	1.1
Total	38	100.0	121	100.0	159	100.0	89	100.0

Table 10 - Did you consider the work personally rewarding or not?

	Yes		No	Not ascertained	
	No.	(%)		No.	(%)
Drop-out	36	94.7	0	2	5.3
Graduate or Continuing	121	100.0	0	0	
Total	157	98.7	0	2	1.3
Homemaker Home Health Aide and Day Care	89	100.0	0	0	

Table 11 - When you began your apprenticeship, did you expect to complete the program?

	Yes		No		Don't Know		Not ascertained	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Drop-out	32	84.2	2	5.3	3	7.9	1	2.6
Graduate or Continuing	115	95.0	0		6	5.0	0	
Total	147	92.5	2	1.3	9	5.7	1	.6
Homemaker Home Health Aide and Day Care	81	91.0	1	1.1	7	7.9	0	

Age - The Female Apprentice

The median age of apprentices surveyed is 31 years, spanning a range from 18 to 61 years. The project has pointed out the social and educational barriers which have worked against motivating younger, non-college bound high school girls toward apprenticeship training. Their lack of information and lack of direct experience with apprenticeable trades has precluded their applications at the age when most men apply (under 25).[26] Only thirty-two percent of the women apprentices interviewed were under age 25. According to the Wisconsin Apprenticeship Administrator, removing age limitations from existing apprenticeship standards would not necessarily bring more women into the trades, but would have the effect of compounding the competition. He thinks that the ideal resolution is to solicit more female applicants for high paying apprenticeships under the existing age ceilings and to seek, and realistically expect, waivers for individual exceptions.

Education of Female Apprentices

The flexibility of the apprenticeship standards should be pointed out in relation to educational requirements. Virtually all programs require that a high school diploma or its equivalent be an apprenticeship prerequisite. But, for females, the exception was made in 33% of the applications and, for males, in 9% of the apprentices surveyed by Barocci.[27]

---

[26] Barocci, p. 91.

[27] Barocci, p. 88.

Our survey showed that two-thirds of the apprentices had completed high school. College or vocational training beyond high school (other than apprenticeship classes) had been the experience of 46% of the group. Since nearly half had had course work beyond high school, their choice of pursuing apprenticeship training emphasizes that both college and non-college women should have access to apprenticeship information and opportunities.

A higher proportion of day care and homemaker home health aide apprentices (18 of the 22 with grade 12 education) had taken college courses beyond high school, indicating, perhaps, that apprenticeship--immediate employment combined with relevant related instruction--was the more economically feasible route to achieving their job goals.

Table 12 - Female Apprentices: Years of Education

	0-8		9-11		12		12+		Voc. Training	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Drop-outs	3	7.9	6	15.8	22	57.9	7	18.4	11	28.9
Graduate or Continuing	12	9.9	21	17.4	73	60.3	15	12.4	40	33.1
Total	15	9.4	27	17.0	95	59.7	22	13.8	51	32.1
Homemaker Home Health Aide and Day Care	7	7.7	11	12.4	53	59.6	18	20.2	28	31.5

Marital Status

Sixty-three percent of the apprentices had been married at one time, with 52% having intact marriages when the survey was conducted. The attitudes of husbands toward wives' employment and training are generally supportive, a factor which we believe plays an important role in the successful pursuit of a non-traditional training route. Forty-seven percent had working husbands who agreed with their wives' choice of training. We did not question the salary of the husband, but asked whether the female apprentice was the main support of her family and, in 59% of the cases, the response was yes. (See Table 14).

In contrast with the Barocci study which showed that only 34% of the male apprentices were married when they began apprenticeship, the higher percentage of married beginning female apprentices and their higher median age (31 as opposed to 25 for males) indicates that more women are likely to view marriage and child rearing as an interruption of their education or work outside of the home.[28]

---

[28] Barocci, p. 97.

Table 13 - Are you presently married, widowed, divorced, separated or have you never married?

	Married		Widowed		Divorced		Separ.		Never Married		NA
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	
Drop-out	23	60.5	1	2.6	2	5.3	1	2.6	11	28.9	0
Graduate or Continuing	60	49.6	3	2.5	15	12.4	4	3.3	39	32.2	0
Total	83	52.2	4	2.5	17	10.7	5	3.1	50	31.4	0
Homemaker Home Health Aide and Day Care	45	50.6	4	4.5	12	13.5	3	3.4	25	28.1	0

Public Financial Assistance: Heads of Households

One strong claim made by the Women in Apprenticeship Project has been that women should have the opportunity to achieve economic independence through an apprenticeship position with its assurance of certification and employability. Thirty-seven percent of women interviewed were the sole supporters of their families. On entering apprenticeship, those women who were receiving some form of public financial assistance, such as AFDC, were 26% (42) of the total sample. Over half of them (25) became financially independent of AFDC payments while they were employed in apprenticeship situations. We do not know whether it is the employment in itself, or the employment through apprenticeship which is the key factor, but the statistic is a dramatic testimony to the willingness of AFDC recipients to become financially independent when opportunities for employment-training exist.

Table 14 - Are you the main support of your immediate family?

	Yes		No		Not Ascertained
	No.	(%)	No.	(%)	
Drop-out	9	23.7	29	76.3	0
Graduate or Continuing	50	41.3	71	58.7	0
Total	59	37.1	100	62.9	0
Homemaker Home Health Aide and Day Care	38	42.7	51	57.3	0

Table 15 - Have you ever received any public financial assistance such as AFDC, WIN Program Fund, or other government sponsored programs?

	Yes		No		Not Ascertained
	No.	(%)	No.	(%)	
Drop-out	12	31.6	26	68.4	0
Graduate or Continuing	30	24.8	91	75.2	0
Total	42	26.4	117	73.6	0
Homemaker Home Health Aide and Day Care	31	34.8	58	65.2	0

Wages

On the whole, the beginning wages of female apprentices averaging $70 weekly, are comparable to those reported in the general apprenticeship population in the Barocci study: $71 for drop-outs; $76 for completers.[29] We expected the disparaties between male and female beginning wages to be minimal in the apprenticeable occupations (even though the Conference Board, a non-profit research organization, reports the overall difference between higher male and lower female median wages to have been 41% both in 1939 and in 1970!)

---

[29] Barocci, p. 147.

The apparently low wage for beginners (slightly more than the federal minimum wage at $64 a week) can be explained by factors which tend to keep the average beginning apprenticeship rate at $1.80--$2.00. In rural parts of the state, even plumbers and auto mechanics, as well as day care teachers, may start at a wage of $1.60 an hour, or one-half of the competitive journeyperson rate. The low average is also understood when we note that the beginning rate (exclusive of commissions) for a cosmetology apprentice (7% of the Women in Apprenticeship sample) was legal at $.60 an hour before December 1972.

The trainee status of the apprentice implies a relatively low beginning wage, with salary increments insured every six months until the journeyperson rate is reached. The average journeyperson wage in the state is $4.50 an hour. We estimate the journeyperson average of the occupations represented in the Women in Apprenticeship study to be $4 an hour. It is reasonable to assume that this differential will disappear as there is more overlap of men and women into trades that traditionally were the preserve of the other sex.

With respect to their judgements about the wages received, we observed that some females in the work force, even when they are apprentices, are resigned to the fact of receiving low wages. Presenting their beginning wage as an apprentice in either hourly, weekly, or monthly rates, 26% (41) of the women reported receiving a beginning salary of less than $1.60 an hour, the current federal minimum wage. Contrary to expectation, fully 61% (97) of the respondents indicated that they were satisfied with the beginning rate. An additional 10% (16) claimed that they were satisfied only in that they realized that their wage category was a temporary rung on the progressive ladder of apprenticeship.

Those who started at the lowest range ($1.60--$2.00) paradoxically were those same respondents who were satisfied with their salary. Generally speaking, those who started apprenticeships at $2.50--$3.50 an hour were more dissatisfied with their salary, a characteristic perhaps more readily identified with individuals who have greater expectations because they are in better paying trades (graphic arts, industrial trades, as opposed to the service trades) where it is realistic to expect a high journeyperson rate.

Drop-outs, graduates, or continuing apprentices show an even distribution of attitudes toward salary. However, six of the 38 (16%) drop-out apprentices indicated that they left apprenticeship because the salary was not high enough. All six report that they are receiving a higher wage in their present employment, although not in the same trade. Whether their reason for dropping apprenticeship was salary related or not, fully 70% of the drop-outs were receiving a higher salary than the apprenticeship rate in their new positions, a factor which was immediately true for the general drop-out, as reported by Barocci.[30]

Table 16 - Weekly Beginning Income of Female Apprentices

	Drop-out		Graduate or Continuing		Total		Homemaker Home Health Aide and Day Care	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Less than $50	5	13.2	10	8.3	15	9.4	4	4.5
$50 - $69	17	44.7	38	31.4	55	34.6	38	42.7
$70 - $99	9	23.7	47	38.8	56	35.2	34	38.2
$100 - $139	1	2.6	8	6.6	9	5.7	5	5.6
$140 - $300	0		6	5.0	6	3.8	3	3.4
Commission	2	5.3	3	2.5	5	4.1	0	
Not Ascertained	4	10.5	9	7.4	13	8.2	5	5.6

Quality of Training

The evaluation of the quality of their training, as perceived by the female apprentices presents some points leading to direct recommendations to the Division of Apprenticeship and Training. In the context of the three-year study, our inclination is to interpret the current facts of low wages and incomplete related instruction as a verification of the desperate employment picture which women face and tolerate, even in apprenticeship, a presumed area of potential equalization of male and female earning power.

---

[30] Barocci, p. 152.

For example, in Wisconsin, apprenticeship, by law, should always include a formal training component, apart from the on-the-job portion of the apprenticeship. At the time of the survey, 32 women (20%) reported that they received no related instruction. One-half of the apprentices represented in that figure were part of the day care teacher apprenticeship program which had been organized for only sixteen months when the survey was made. The delayed response of the vocational system to meet the needs of the day care apprenticeship program is cited elsewhere in the project reports. At this writing, the related instruction is now a part of the training for 21 of those 32 respondents, who, when contacted in a recent group interview, said their view of apprenticeship related instruction has improved significantly now that they have it.

Table 17 - Was classroom related instruction for apprenticeship provided?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	23	60.5	11	28.9	4	10.5
Graduate or Continuing	96	79.3	21	17.4	4	3.3
Total	119	74.8	32	20.1	8	5.0
Homemaker Home Health Aide and Day Care	70	78.7	16	18.0	3	3.4

The provision of paid related instruction is apparently not always assumed by the employer in the occupations where women are employed. Of those who did attend related instruction classes, 20% (25) did not get paid while they attended. Those who participated in incomplete programs answered that they felt the sacrifice to be necessary for them to get the required training for advancement.

Since the 1911 Wisconsin Apprenticeship Law clearly provides for paid related instruction, we believe that women are reluctant, or do not know about the procedure for filing a claim with the DAT. When one inquires how males learn about filing a claim, the response is usually, "They hear about it from a buddy." Since women have had little or no tradition within the apprenticeship system, it is not unusual that they would not know of their legal recourses. We do observe, however, that 81% of the respondents said they understood the legal provisions of their indentures, and 53% knew how to contact the DAT for help or advice. The crucial role of the DAT in enforcing the legal benefits of apprenticeship training (work experience plus related instruction) is dramatized where both women and minorities are involved since until recent years neither group could claim participants who could pass on an inside knowledge of the system to others.

Table 18 - Do or did you know how or whom to contact in the Wisconsin Division of Apprenticeship and Training if you needed help or advice?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	18	47.4	17	44.7	3	7.9
Graduate or Continuing	66	54.5	54	44.6	1	.5
Total	84	52.8	71	44.7	4	2.5
Homemaker Home Health Aide and Day Care	41	46.1	47	52.8	1	1.1

Table 19 - Was a skilled person or one of journeyperson rank working closely with you?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	24	63.2	12	31.6	2	5.3
Graduate or Continuing	87	71.9	31	25.6	3	2.5
Total	111	69.8	43	27.0	5	3.1
Homemaker Home Health Aide and Day Care	55	61.8	32	36.0	2	2.2

Physical Aspects of Work

As to their personal reactions to the physical tasks involved with their work, 19% (30) reported that there were physical aspects of the job which they found to be too difficult. Lifting for auto body reconditioning and long hours of standing and rigorous activity for a small percentage of day care teachers are representative of the hardships which respondents described. Although the degree of difficulty is not revealed in their responses, no woman left an apprenticeship position with "the tasks were too difficult" as the reason. It may be significant, however, that looking in retrospect at their apprenticeship positions, 32% of the drop-outs said they had to undertake physical tasks which they believed to be "too difficult" while only 15% (18) of the continuing or graduates mentioned it. The drop-out may have felt freer to emphasize the negative aspects of a past work experience where long hours of standing or heavy cleaning contributed to their present dim view of the apprenticeship experience.

Table 20 - Were there any physical aspects of the job that you found too difficult...such as heavy lifting or standing for long hours?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	12	31.6	24	63.2	2	5.3
Graduate or Continuing	18	14.9	103	85.1	0	
Total	30	18-9	127	79.9	2	1.3
Homemaker Home Health Aide and Day Care	14	15.7	75	84.3	0	

Day Care Needs

Since 37% of the apprentices are the sole support of families and 63% had children, we tried to determine whether the availability of child care in any way related to the job performance of apprentices. Of the 30% of the apprentices who required child care--both for pre-school and after school care for school age children, 92% felt they had satisfactory child care arrangements.

We should not be surprised at the high rate of success in obtaining child care, since our sample includes only those who successfully entered apprenticeship training and does not account for those who could not enter because they did not have adequate child care arrangements.

Table 21 - How many children do you have?

	Drop-out		Graduate or Continuing		Total		Homemaker Home Health Aide and Day Care	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
None	16	42.1	42	34.7	58	36.5	26	29.2
One	4	10.5	18	14.9	22	13.8	12	13.5
Two	8	21.1	18	14.9	26	16.4	14	15.7
Three	4	10.5	13	10.7	17	10.7	15	16.9
Four	1	2.6	11	9.1	12	7.5	6	6.7
Five	3	7.9	10	8.3	13	8.2	9	10.0
Six	2	5.3	3	2.5	5	3.1	4	4.5
Seven or Over	0		6	5.0	6	3.8	3	3.4

Table 22 - Have you usually had satisfactory child care arrangements while working?

	Yes		No		Inappropriate		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Drop-out	5	13.2	1	2.6	32	84.2	0	
Graduate or Continuing	30	24.8	1	.5	90	74.4	0	
Total	35	22.0	2	1.3	122	76.7	0	
Homemaker Home Health Aide and Day Care	23	25.8	1	4.2	65	73.0	0	

The Drop-Out: A Summary

The drop-out appears to have had slightly more education (18% had completed grade 12+; 12% of graduate/continuing had completed grade 12+). Predictably, the drop-out experienced a greater degree of resistance to her entering apprenticeship than the graduate/continuing apprentice (21% as opposed to only 12% of graduate or continuing). The source of the resistance varied, but generally was defined as that of expressed negative opinions of close associates: parents and friends, rather than co-workers. As might also have been expected, a higher (albeit, a small raw number) percentage (8% compared to 2% of the graduate or continuing) of drop-outs said they did not have friendly daily relations with co-workers.

Of a practical nature, twice as many drop-outs experienced transportation difficulties in relationship to getting to and from work, as did continuing or graduate apprentices, and two specifically dropped out because transportation was a problem.

A higher percentage (61% drop-out; 50% graduate/continuing) of drop-outs were married, having intact marriages at the time of the survey, a factor which, for some, might have allowed for greater variety in job choice and minimizing the risk of the family losing all earned income at least until another job was found. Only 24% of the drop-outs were the main source of income for their families, whereas 41% of the continuing or graduates headed their households financially. The degree of financial responsibility in terms of dependents is also less for the drop-out since 42% reported having no children, while 35% of the graduate/continuing had no children. Only five percent of the drop-outs said they terminated apprenticeship because of leaving the state. However, 50% of the 34 non-respondent apprentices had moved at the time of the survey, and we do not know what the relationship between their mobility and the apprenticeship experience was.

As to the quality of the training received, 29% of the drop-outs did not receive related instruction for apprenticeship (compared with only 17% of those who graduated or continued); and 32% (26% of graduate/continuing) did not have a skilled person of journeyperson rank working closely with them.

None of the drop-out apprentices discontinued the training program for childbirth or pregnancy-related reasons, although 6 of the total survey group had been absent on a maternity leave basis, each having been reinstated in her apprenticeship position at the time of the survey.

Table 23 - Why did you drop out of training?

	No.	(%)
1. Salary wasn't high enough for my needs	6	15.7
2. Moved out of state	2	5.3
3. I terminated my employment	3	7.9
4. Employer went out of business	3	7.9
5. Job was too far away (transportation)	2	5.3
6. Someone else was hired to fill my place	2	5.3
7. Full program hadn't begun	3	7.9
8. Health reasons	2	5.3
9. Other individual reasons	15	39.4

Table 24 - Did you meet any resistance; by that we mean criticism or unfavorable comments and lack of cooperation from your family, friends, or co-workers when you first decided to become an apprentice?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	8	21.1	30	78.9	0	
Graduate or Continuing	15	12.4	106	87.6	0	
Total	23	14.5	136	85.5	0	
Homemaker Home Health Aide and Day Care	9	10.1	80	89.9	0	

Table 25 - While you were an apprentice, did you generally have friendly daily relationships with co-workers?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	32	84.2	3	7.9	3	7.9
Graduate or Continuing	118	97.5	2	1.7	1	.5
Total	150	94.3	5	3.1	4	2.5
Homemaker Home Health Aide and Day Care	18	20.2	71	79.8	0	

Table 26 - During your apprenticeship, was transportation to and from work a problem for you?

	Yes		No		Not Ascertained	
	No.	(%)	No.	(%)	No.	(%)
Drop-out	9	23.7	27	71.1	2	5.3
Graduate or Continuing	15	12.4	106	87.6	0	
Total	24	15.1	133	83.6	2	1.3
Homemaker Home Health Aide and Day Care	18	20.2	71	79.8	0	

In most respects, the characteristics of the drop-out confirm the project hypothesis that specific steps could be taken to lower the apprenticeship drop-out rate even more if a.) the Division of Apprenticeship and Training were staffed more completely to insure that on-the-job training, related instruction and reasonable wages were provided in all programs; b.) if an outreach or employment guidance function were at the disposal of apprentices who sense social resistance or who experience practical problems such as transportation, which an interested party might help resolve. Twenty-six percent of the drop-outs reported that they would have continued the apprenticeship program if someone had encouraged them. Ideally, a proposed "female in apprenticeship" outreach project would not only motivate more women to begin apprenticeship training, but would also enable more to complete.

EMPLOYERS OF WOMEN APPRENTICES SURVEY

A survey of all those employers who took on female apprentices during the life of the project was intended to provide insights into the apprenticeship employability of women, and into the underlying reasons for females dropping out of programs. We also hoped to learn more about the motivations and attitudes of employers in general with respect to training women.

A questionnaire, designed by the project coordinator with the cooperation of the University of Wisconsin Survey Research Laboratory director, and mailed to the 90 employers of women apprentices resulted in a 61% response rate.[31] The survey was conducted between March and April, 1973, with the project coordinator directing the mailings and making follow-up telephone calls to encourage employer responses.

The Drop-out: Employer Responses

Employers were divided on reasons for female drop-outs. Twenty-six percent of employers who had female apprenticeship drop-outs

---

[31] See Appendix K: Wisconsin Women in Apprenticeship Employer Survey, 1973.

(representing 8 drop-outs) speculated that lack of interest or lack of desire to better themselves was the main factor in non-completion. Twenty-three percent reported that their apprentices had left apprenticeship because they had moved to another area. Sixteen percent said apprentices had left their program to get married. It is interesting to note that no respondents among the female drop-outs gave marriage as a reason for terminating the training, and two of the employers cited "they got married" as the most negative aspect of their experience with female apprentices. The discrepancies in perceptions of reasons for dropping show even more when no employer cited "low salary" as the reason for an individual leaving training, whereas 16% of the drop-outs gave that as the main factor leading to their dropping the program.

Table 27 - For any apprentices with your organization who dropped out of the program (cancelled or suspended), what do you believe to be the reasons for their not completing? (Asked of employers who had female apprenticeship drop-outs)

		No.	(%)
1.	Apprentice moved to another area	7	22.6
2.	Lack of interest, no motivation, laziness, lack of desire to better themselves	8	25.8
3.	Apprentice got married	5	16.1
4.	Apprentice quit program	2	6.5
5.	Personality clashes	3	9.7
6.	Distance involved--too far to travel for the related training	1	3.2
7.	Not ascertained	5	16.1

As the project speculated, some apprentices (26% of the drop-outs) did indicate that they would have continued the program if someone had encouraged them. The employer perception of whether someone was available to the apprentice for counselling was extremely positive, with 93% claiming that skilled persons, or journeypersons, were easily accessible to apprentices when consultation was necessary. The reluctance of apprentices to share work related problems with those supervisors points out the desirability for management training to include motivation and counselling for new apprentices, especially if they are among the first women in the shop.

Employer perceptions of the working relationships of apprentices with co-workers are similar to those reported by apprentices themselves, with 97% of employers and 94% of apprentices stating that they believed that the apprentices had friendly relations with their colleagues. There continue to be employers who claim that females tend to disrupt work procedures, or solicit favored treatment by supervisors, but the great majority (78%) rate the on-the-job motivation of women as the same or higher than other employees. Of those employers in the Fox Valley who employ females in the shop, 66% reported that females make equally good employees as males.[32]

---

[32] Women in Apprenticeship Target Area Employer Survey, 1973

Table 28 - For what reasons did your organization decide to train female apprentices initially?

		No.	(%)
1.	The lack of trained help available, shortage of qualified personnel	12	21.8
2.	Females are better qualified in some areas, in certain cases they make better barbers, cooks, etc.	1	1.8
3.	To upgrade our staff	2	3.6
4.	We just wanted to help the individuals who desired training, NFS	8	14.5
5.	Apprenticeship is the best way to learn a trade--to make them effective/competent in their field	8	14.5
6.	This type of training wasn't available from any other source, wasn't offered in this area	2	3.6
7.	The organization was requested to train females by high school counselors, state department of industry, etc.	3	5.5
8.	Equal opportunities for women	4	7.3
9.	Financial benefit	2	3.6
10.	Other	6	10.9
11.	Not ascertained	7	12.7

Table 29 - Generally, did the apprentices have a good working relationship with the other employees?

		No.	(%)
1.	Yes	53	96.4
2.	No	0	
3.	Don't know	2	3.6

Table 30 - Have you ever recommended training female apprentices to another employer in your trade?

		No.	(%)
1.	Yes	24	43.6
2.	No	29	52.7
3.	Not ascertained	2	3.6

Table 31 - How do you rate the on-the-job motivation of the female apprentices as compared with other employees?

		No.	(%)
1.	Higher	16	29.1
2.	The same	27	49.1
3.	Less	6	10.9
4.	Not ascertained	6	10.9

Another example of the credibility gap which exists among some employers is the response of one employer of printers and layout technicians who believed no woman could be employed as a surface technician in the printing industry, yet there have been two such apprenticeships filled by women in the last three years. Even among those employers who have experienced the benefits of apprenticeship training, only 46% have definite plans to continue to train female employees through apprenticeship, while 40% are "not sure". The availability of training funds could be a decisive persuasive factor for those employers who are "on the fence" on this point, since 27% indicated that there was a direct relationship between their original decision to employ female apprentices and their receiving reimbursement for training costs. Forty-six percent of all employers of women apprentices had received supplementary governmental funds related to their providing opportunities to training disadvantaged individuals.

Table 32 - Did you receive any funds (for example, Federal Manpower Development Training funds) because you had (or have) apprentices?

		No.	(%)
1.	Yes	25	45.5
2.	No	29	52.7
3.	Not ascertained	1	1.8

Table 33 - Was the availability of such funds a motivating factor in your participation in on-the-job training for female apprentices?

		No.	(%)
1.	Yes	15	27.3
2.	No	9	16.4
3.	Inappropriate	29	52.7
4.	Not ascertained	2	3.6

Table 34 - Would you, in the future, ever recommend training female apprentices to another employer?

		No.	(%)
1.	Yes	35	63.6
2.	Depends	15	27.3
3.	No	3	5.5
4.	Not ascertained	2	3.6

Conclusions: Women Apprentices and Their Employers

The employer of female apprentices survey findings thus far have been useful in providing data:

1.) To reinforce the project contention that employers are positively motivated to assume apprenticeship training roles if monetary compensation for the expense of providing training is available;

2.) To confirm the results of the Fox River Valley survey, that prejudice against females as apprentices is likely to be minimal in situations where women have already been employed;

3.) To point out the range of motivating factors--most could be incorporated by the DAT in any future promotional attempts--which have led to apprenticeship employment of women. (See Table 28);

4.) To encourage employers to train management-supervisory personnel to be sensitive to the feelings and attitudes of individuals breaking employment barriers, whether they be females or racial-ethnic minorities.

The publicizing of the facts of a.) low female apprentice drop-out rates; b.) high employer satisfaction with the work and training performance of women now rests with women's advocates wherever they exist and with the Division of Apprenticeship and Training as it proceeds to pursue the project goals.

CHAPTER 7. CONCLUSIONS: WOMEN IN APPRENTICESHIP -- WHY NOT?

PART ONE

I. THE APPRENTICESHIP COMPLEX

- A. Apprenticeship: Supervisory Agency
  - Recommendations for the State Division of Apprenticeship and Training
  - Recommendation for the U.S. Department of Labor
- B. Apprenticeship: Employers
  - Recommendations for Employers
  - Recommendations for the U.S. Department of Labor
- C. Apprenticeship: Unions
  - Recommendations for Unions
- D. Apprenticeship: Realistically Approachable Trades
  - Recommendations
- E. Apprenticeship: Expansion
  - Recommendations to the U.S. Department of Labor

II. THE PRE-APPRENTICESHIP COMPLEX

- A. Employment Agencies: Wisconsin State Employment Service and Work Incentive Program
  - Recommendations for State Agencies
  - Recommendations for U.S. Department of Labor
- B. Educational Systems: Public and Vocational Schools
  - Recommendations for Educational Systems

III. WOMEN THEMSELVES

- Recommendations to Women
- Recommendations to the U.S. Department of Labor

PART TWO

METHODOLOGY AND PROJECT OBSERVATIONS ABOUT OURSELVES

- Recommendations

CHAPTER 7. CONCLUSIONS: WOMEN IN APPRENTICESHIP--WHY NOT?

The project conclusions are divided to report in Part One, where we found resistance to the utilization of women in the system of formal apprenticeship employment, what steps have been taken to minimize the barriers, and what our recommendations for future actions are. We have focused our discussions on:

I. The Apprenticeship Complex, including:
   A. The State Division of Apprenticeship and Training;
   B. Employers;
   C. Unions;
   D. Realistically, approachable trades; and
   E. The Expansion of Apprenticeships;
II. The Pre-apprenticeship Complex, including:
   A. Public Employment Agencies;
   B. Public Educational Systems; and
III. Women Themselves

In Part Two, we have described the design, ideas, and methodology we found to be most effective in carrying out the broad research and demonstration efforts to isolate, analyze, and minimize the barriers which exist to women participating in apprenticeship. Recommendations are included for the consideration of State Apprenticeship Agencies and women's advocacy groups which may wish to conduct similar or related projects.

PART ONE

I. THE APPRENTICESHIP COMPLEX

A. Apprenticeship: Supervisory Agency

In brief, apprenticeships are training agreements contracted among an apprentice, an employer or joint apprenticeship committee (composed of employer and union representatives) and either the State Apprenticeship Agency or the Federal Bureau of Apprenticeship and Training. In Wisconsin, the 1911 Apprenticeship Law indicates that the state shall supervise the training agreement while the vocational system provides related instruction. The training agreement specifies:

a.) On-the-job training: Component activities and paid hours of work;

b.) Related theoretical instruction: Subject areas and paid hours;

c.) Length of training period; and

d.) Specified salary increments as the work and training progress.

While observing the system at work, we found there were resistances in attitudes and practices at all levels of the apprenticeship system which historically had worked against the participation of women. Within the Division of Apprenticeship and Training itself, the project personnel overcame traditional, institutionalized sexism (reflected in all male references and male assumptions for apprenticeships in the graphic arts, industrial and construction trades) to the degree that many of the permanent staff have assumed the project's public education activities to expose the facts vs. the myths of women in employment.

The very existence of the Women in Apprenticeship Project housed within the Division of Apprenticeship and Training is significant testimony to the willingness of the Division's administration to incorporate women in the trades through apprenticeship. As the project formally concludes, a new understanding among DAT staff members is evident in their individual efforts at guiding women into apprenticeship and in persuading employers to consider women as apprentices. But most do not purport to be advocates of all that the women's movement implies. More manifestly, their activities are tempered by the requirement to be accommodating to apprenticeship employers while attempting to inform them of the dictates of equal rights laws and equal employment in apprenticeship guidelines.

Therein lies a dilemma for the Division of Apprenticeship and Training brought about by its dual function: to supervise a voluntary training arrangement (apprenticeship) and to regulate and enforce equal opportunity recruiting and hiring practices which might not be readily accepted by employers. The legal existence of the apprenticeship agency itself relies on the voluntary use of the apprenticeship training system by employers and joint apprenticeship committees. A self preservation factor in the Division might quite naturally inhibit its aggressive monitoring or enforcement of the apprenticeship pledge requiring employers to recruit from both sexes and from all racial groups. The clash of the two functions is illustrated in the case of a recent DAT reversal of the decision of a regional joint apprenticeship committee in barbering denying a woman an apprenticeship position because, "Women are not suitable as barbers." The barbers in question have retaliated by supporting state legislators from their area as they propose in the Wisconsin Legislature that training for barbering be removed from the jurisdiction of the Division of Apprenticeship and Training.

A tension of dependency is established between employers who ultimately may or may not choose to train employees via apprenticeship and the DAT which seeks in all programs to insure that industry's training needs, as defined by employers and unions, can be met through apprenticeship.

It has been the inclination of the project to insist on immediate, active enforcement and monitoring of the equal opportunity apprenticeship pledge, adopted in April, 1972. It is the moderate policy of the DAT that more long-range progress occurs by laying a foundation among unions and employers through education and persuasion rather than through coercion. Having observed dramatic gains in the apprenticeship employment of minority males (a tenfold increase in 4 years: from 30 to 300 apprentices), the DAT administrator believes the same openess to change, tempered by patience, to be the valid stance of his agency in relation to the recruitment of female apprentices.

Notable changes in the Division of Apprenticeship and Training have been:

1. Including women in the affirmative action pledge in State Plan for Equal Employment Opportunity in Apprenticeship and strengthening the provisions of Federal Title 29 (as it applies to affirmative action in apprenticeship) to include women;
2. Changing of apprenticeship job titles so they do not reflect sex designations. Examples: Foundry Man to Foundry Worker; Radio-TV Repairman to Radio-TV Repair Person;
3. Sensitizing present apprenticeship employers to the potential contribution of women as apprentices; for example, suggesting that retiring plumbers and watchmakers consider passing their trades on to the family daughters;
4. Hiring women and utilizing the apprenticeship method of training women to become members of the once all male professional staff. One woman is now an apprentice Training Representative; another is a Veteran's Specialist; and a third is a Field Representative;

5. Omitting sex references from promotional literature;
6. Recruiting both high school girls and boys for participation in high school career day conferences.

Recommendations for the State Division of Apprenticeship and Training

1. That the State Apprenticeship Equal Opportunity Pledge and Affirmative Action commitment be routinely and rigorously monitored among apprenticeship employers to encourage and insure compliance;
2. That age restrictions in apprenticeship either be eliminated or waived to permit more women to be eligible for training opportunities;
3. That the trend toward breaking down sex stereotyping in the hiring patterns of the Division be continued;
4. That the presently all male, fourteen member State Apprenticeship Council, an advisory body to the DAT administrator, include women as representatives of both unions and employers;
5. That especially during years of transition of women into the trades, definite steps be taken by DAT staff to insure women's awareness of the regulations and benefits governing their apprenticeship agreements;

6. That continued efforts be made to "desexigrate" the language of apprenticeship literature; for example, the state standards for the carpentry trade asserts: "A sound apprenticeship program for training qualified young men has proven to be the only means of attaining these (required) skills."

Recommendations for the U. S. Department of Labor

1. That action be taken to amend Title 29 Part 30 (federal regulations governing apprenticeship) to include women in apprenticeship affirmative action plans and also in the goals and timetables for compliance.

B. Apprenticeship: Employers

Employer acceptance in attitude and practice of the equal capacity of women to function in apprenticeship relies on their knowledge of facts, their actual experience, and their understanding of equal employment opportunity laws.

From the comparative target area employer surveys conducted in 1970 and in 1973, it is apparent that hiring and training practices are changing at a slower rate than attitudes or the expressed understanding of federal Equal Employment Opportunity or State Fair Employment Practices regulations. Where women were already employed in a shop, a lesser degree of prejudice against them was registered.

The 1973 survey of employers of women apprentices revealed that 78% thought women were equal (or better) in reliability and production when compared with other employees. The Fox River Valley comparative employer surveys of 1970 and 1973 showed that about 50% of the manufacturing employers said there were apprenticeships for which women were unsuited because the work was too dirty, involved heavy lifting, was too dangerous or simply involved hard, grinding tasks. Yet, 65% of the employers acknowledged that they knew of women who did work which was dirty, messy, involved heavy lifting and required technical abilities.

To close the information gap, the project aimed at saturating the employment community with educational materials, having produced and distributed:

1. How About Women?, a brief descriptive brochure which questions "Have you been looking at sex rather than suitability?";
2. Working Women: Fact vs. Myth, a one page, hard-hitting list of myth vs. fact, especially as they relate to women in technical employment;
3. Never Underestimate the Power of a Woman, a 15-minute color film, aimed particularly at employers, presenting women successfully at work in non-traditional jobs;
4. How to Become an Apprentice, a simple guide to the apprenticeship occupations and procedures for application.

Employers are always cautious to weigh the benefits of utilizing apprenticeship against the cost of training. During the three years (1970-1973) of project activity, Wisconsin MDTA-JOPS funds expended to employers of women in training rose from 10% to 40% of the total. Forty-six percent of the employers who employed women apprentices from 1970-1972 had received such funds, and 27% said that the availability of the training funds was a motivating factor in their decision to train women apprentices. Since the financial risk is a reality, even with the lower than average dropout rate of women, the continued availability of the funds is vital to the employer whose participation in a training program is otherwise not feasible.

Some large employers in the tool making and automotive industries for whom funding is not a major consideration, have expressed frustration with not finding women applicants in competitive numbers when they have sought candidates for trainee positions within their plants. The project has urged inplant campaigns to publicize apprenticeship openings and to sensitize management and supervisory personnel to the social and psychological pressures which might discourage qualified women from breaking out of lower paying, traditionally female job slots to compete for higher salaries and skilled training.

Recommendations for Employers

1. That supervisory personnel be trained to help overcome the social and interpersonal resistances which may make the integration of women in the labor force a strain on the pioneering women and on their co-workers.

Recommendations for the U. S. Department of Labor

1. That legislation be designed which would result in financial support to employers to compensate for training costs. The subsidy could take the form of a tax rebate or of "redeemable tokens" to be assigned to the target population, perhaps minority females, whose employers would qualify for training funds as the women were hired.
2. That the U. S. Department of Labor carry out a promotional campaign aimed at educating labor and management on discriminatory patterns that might exist in their collective bargaining agreements. Such a procedure should be conducted to avoid costly, inevitable lawsuits.

C. Apprenticeship: Unions

Closely related to the hiring practices among employers are the apprenticeship stipulations within union bargaining agreements. Specifically, inplant posting, seniority regulations, and preference given to applicants who have survived heavy and demanding "bull work" (which, in most cases, has no bearing on the ability to assume an apprenticeship) have all had the effect of perpetuating access discrimination.

Regrettably, the project did not conduct extensive surveys or interviews with union members or leaders, but relied heavily on participation in trade union conferences and workshops sponsored by the University of Wisconsin School for Workers, to disseminate information and solicit support for the project goals. The project gained notable organized labor support when the State Council of AFL-CIO unions publicly supported:

a.) the National Equal Rights Amendment;
b.) a uniform state maternity leave policy; and
c.) since 1970, the annual convening of a State AFL-CIO Women's Conference.

The AFL-CIO Wisconsin Women's Conference reflects the concern of union women for addressing basic issues of equal pay for equal work and for equalized training opportunities where they are employed. This organization is pledged to the goals of a more equitable integration of women into the work force.

Recommendations for Unions

1. That teams of labor and management representatives assume an education function among bargaining agents to insure a knowledge of Equal Employment Opportunity laws. The activities, if kept within an information dissemination

realm, would not be threatening in intent but, rather, would focus on eliminating for unions and employers, the possibilities of incurring costly law suits.

2. That coalitions of union women seek to expose and eliminate sex discrimination practices where they exist.
3. That unions routinely grant waivers to the rigid inplant posting and seniority rules so that apprenticeship affirmative action pledges can be realized in occupations and plants where no women have been previously employed.
4. That age limitations for trainee positions be waived for qualified female candidates since it is still true that most women turn to apprenticeship opportunities after marriage and childbearing and, consequently, are beyond the cut off age for most higher paid, construction apprenticeships.

D. Apprenticeship: Realistically Approachable Trades

The project's demonstration efforts were concentrated in Wisconsin's Fox River Valley, a target area where there is a high concentration of apprenticeship employers. Among possible "starter" employers for the integration of women apprentices, the construction industry was eliminated as a first choice early in the term of the project. The decision was based on:

a.) the high percentage of laid off construction workers--
an 18% decrease in employees in 1970;

b.) the length of the joint apprenticeship committee waiting
lists of those requiring placement--over 100 on the
electricians' lists in many parts of the state; and

c.) the simple fact of an anticipated higher degree of
tradition-based bias among the construction contractors
and unions.

Larger manufacturing plants, machine tool companies, paper mills, were not approached directly, other than through the Fox Valley Survey of employer attitudes. The inplant posting and seniority requirements for apprenticeship application in those plants required some basic hiring changes, or changes in the union bargaining agreements. Therefore, the project selected smaller, non-unionized trades as "starters." Tire-retreading and auto-body reconditioning were among the first trades in the target area to accept project suggestions that women be apprenticed. In both occupations, the two females who were referred by the project, although demonstrating on-the-job capabilities, had personal, psychological and social problems for which the project made referrals to social service agencies. The television repair industry and the graphic arts, including photographic processing and lithographic stripping were receptive to indenturing female apprentices.

As important as which trades could be "starters," is the consideration of the state of the economy. Ideally, a focus on placement of women should coincide with at least a stable or accelerated period of economic growth. The project experience, in terms of receptivity of employers and actual availability of positions was definitely affected by the lagging economy from 1970-1972. Citing an overall apprenticeship enrollment decline from 8,781 in 1970 to 7,433 in 1972, the project notes that women involved in formal training held relatively steady (393 in 1970; 382 in 1972), with a decline in cosmetology and a marked increase in the range of trades where women are apprentices.

Recommendations

1. Small shops in either the graphic arts or manufacturing trades preferrably non-union, may be most receptive to training women apprentices.
2. That government agencies expect higher placements of women during periods of economic stability or growth.

E. Apprenticeship: Expansion

The project determined that the apprenticeship system could be applied to occupations where performing practical tasks, combined with theoretical related instruction would lead to competency in a skilled work process. From that assumption came the idea that not only were women under-utilized in the apprenticeship work force, but so, too, was the apprenticeship method of training under-utilized in the education and employment universe. While studying the feasibility of bringing women into existing apprenticeships, the project also attempted to introduce the concept of formal on-the-job training to fields where women were already engaged in skilled work.

One probable effect of the expansion of the apprenticeship system to areas where women are traditionally employed will be to more firmly fix apprenticeship and females together in the public mind and thereby facilitate a crossover to the male dominated trades. Hence, were launched the day care and health occupation experiments as well as the project investigation into the Dictionary of Occupational Titles skill code ratings for female dominated trades.

The project concludes that the absence of females from the ranks of apprenticeship field representatives has implied a lack of familiarity by the totally male apprenticeship staff with primarily service occupations which might be recognized as being apprenticeable. Although the day care apprenticeship, with 80 enrollees and 35 employers, is functioning on a statewide basis, the health occupations, with implied credentialling complications, remain largely "beyond the pale."

Recommendations to the U. S. Department of Labor

1. That apprenticeable occupations be expanded to recognize more trades where women have been traditionally employed--the child care and health related occupations.
2. That statewide model apprenticeship programs be created, perhaps in the nurses' aide, laboratory technician and medical records technician trades to compare the competency results with other existing modes of training.

II. THE PRE-APPRENTICESHIP COMPLEX

A. Employment Agencies: Wisconsin State Employment Service and Work Incentive Program

Both the Wisconsin State Employment Service and Work Incentive Program play crucial roles as referral and vocational guidance sources for women in the job market. In its first year, the project discovered that both agencies categorized their job listings into "men's jobs" and "women's jobs" and that employment counselors on the whole were unfamiliar with apprenticeship as an employment option. WIN Program staff in Madison and in the target area expressed a willingness to harmonize project goals for information dissemination and placement of women in apprenticeship with their own agency priorities. However, high staff turnover and the urgency to make numbers of placements without regard to training and earning potential has limited WIN cooperation throughout the state.

Within the State Department of Industry, Labor and Human Relations the questions of the validity of Dictionary of Occupational Title codes to formulate training funds; the absence of a uniform state maternity leave policy, and internal hiring and promotional practices of state government as they relate to women, were all challenged by the project. Marked changes which have taken into account Women in Apprenticeship suggestions are:

1. Removal of sex designations from job titles recognized by the State Department of Industry, Labor and Human

Relations, and used in the Employment Service;

2. Creation of an apprenticeship liaison position in each Employment Service office in the state to bridge the apprenticeship information gap;
3. Staff training sessions held in all Employment Service districts, specifically aiming at sensitizing counselors to sex stereotyping attitudes and practices, as well as exposing the myths vs. the facts of women in employment;
4. Cooperation with the WIN state administration to exchange apprenticeship and WIN personnel so that each agency can focus on eliminating sex stereotyping from its functions;
5. Funding by the U. S. Department of Labor of a Wisconsin-based project to study and recommend changes in the Dictionary of Occupational Titles skill complexity ratings for health and child care related occupations;
6. Sponsorship by the U. S. Department of Labor of a maternity leave study to research the benefits to women and costs to employers of insurance payments and job reinstatement for pregnancy or childbirth reasons to women workers;
7. Initiation of an Intergovernmental Personnel Act project to study the career patterns of women in state service.

Recommendations for State Agencies

1. That apprenticeship placements be recorded on WIN and WSES records as bonafide employment referrals.
2. That WSES and WIN administrators examine the effects of their striving for quantity of placements on the quality of non-stereotyped service to women applicants.
3. That WSES continue serious monitoring of promotional literature to remove gender specific materials and references.

Recommendations for U. S. Department of Labor

1. That the Department of Labor focus on re-examining the skill complexity rating hierarchy as it has been applied in the Dictionary of Occupational Titles to jobs traditionally filled by women and that sex specific job titles be removed from the 1976 edition of the *Dictionary of Occupational Titles*.
2. That an extension of the present *Dictionary of Occupational Titles* project be sponsored to analyze the clerical and nursing fields, and to provide technical assistance to the WIN program.

B. Educational Systems: Public and Vocational Schools

The far-reaching, pervasive influence of the public education system on the socialization and ultimate career choices of women is acknowledged. The project attempted to be a source of informational material for the schools and to broaden the understanding of guidance counselors of new and non-traditional options for women. Familiarity with several high schools through frequent showings and discussions of the project film, Never Underestimate the Power of a Woman, along with speeches and workshops have led the project to suggest changes so that pre-apprenticeship tracking and exposure to a wide variety of technical classes are not solely the option of male students. Even though their total participation in technical and industrial courses in Wisconsin is ten times as great in 1973 as it was in 1970, young women still constitute only 1.5% of the public school enrollment in pre-apprenticeship classes. Enlightened guidance counselors and teacher encouragement is an obvious prerequisite to enrollments of junior and senior high school girls in technical and industrial classes. Increased enrollments, along with an anticipated decreased social stigma, will unquestionably result in the more "natural" assimilation of young women into the apprenticeship trades.

Likewise, the vocational system, both in the sense of providing pre-apprenticeship, technical classes and in offering the technical related instruction for the apprenticeship trades, has been contacted by the project to trace any trends toward enrollment of women and to aid in the development of a complete related instruction for the newly apprenticeable day care teacher program.

School system changes related to the Women in Apprenticeship Project have been:

1. Opening of the former Milwaukee Boys' Technical High School to girls and changing the name to Milwaukee Technical High School:
2. Eliminating all sex designations from the Wisconsin Instant Information on Education and Work vocational guidance materials;
3. Increased emphasis on presenting non-biased vocational career information at high school career day conferences;
4. Vocational system cooperating throughout the state in providing related instruction for newly apprenticeable occupations, particularly for "day care teacher" apprenticeships;
5. Development, by the University of Wisconsin Extension, of a pilot teacher training course, "Sex Stereotyping in the Public Schools" attended by 50 teachers in its first semester.

Recommendations for Educational Systems

1. That all gender references in occupational guidance tools be eliminated. Nationally, the computerized vocational information system, known as Vocational Information on Education and Work should be reviewed for sexist references.
2. That teachers and counselors be encouraged or required to participate in human relations courses which include

facts on the damaging effects of sex stereotyping.

3. That public schools make pre-apprenticeship training and apprenticeship occupational information available with equal promotional efforts to both boys and girls.
4. That a study be done of what students, teachers and counselors do and do not know about labor market limitations and opportunities and that the results be incorporated into a guidance course curriculum and film aimed at dispelling high school myths and portraying attractive role-models for non-college bound girls.
5. That the promotional literature of the state vocational system portray both male and female models in non-stereotyped occupations and that visible efforts be made to inform women of opportunities to enroll in technical and industrial courses.
6. That an apprenticeship film or video-tape for use in junior and senior high schools be produced. Such a film focusing on affirming occupational options should be devoid of stereotyped expectations which have limited male and female career choices in the past.

III. WOMEN THEMSELVES

The first two years of the Wisconsin project showed that women seek skilled training, job satisfaction and security through their apprenticeships, with 76% of those who began apprenticeship since 1970 reported as graduated or continuing at the conclusion of the first phase of the project. The low female dropout rate of 24% (compared with a male dropout rate in Wisconsin of 44%--50%) strengthens the project hypothesis that women do not represent a higher employment risk than males in skilled trade training programs.

The attractiveness of apprenticeship to women who, of economic necessity, must work is pointed out by the 37% of the participants who are heads of households and the 59% of the 42 who were AFDC recipients before becoming apprentices who were able to be free of welfare payments after they became apprentices.

Can the tendency toward women not applying for apprenticeship be reversed? This most pervasive of all the barriers encountered was attacked primarily through informing union women; informing the public schools; helping to open up to females the pre-apprenticeship training facilities in Wisconsin's only technical high school; publicizing through news articles apprenticeships for women as a project goal; distributing quantities of apprenticeship and women in employment literature to individuals and women's groups; and encouraging and persuading high school girls to broaden their vocational choices. If the tendency has not been reversed, at least some changes are visible in the cases of females now applying to become plumbers, electricians, carpenters, painters and tool makers.

There is evidence of progress, but the socialization of women, we concede, is a "cradle to grave" process in which changes will occur gradually. In Wisconsin, the foundation for application and entry into the trade~~s is~~ laid, but producing numbers of qualified candidates remains to be done. The burden of change cannot be thrust upon girls and women alone. Recognizing the changing roles within families, coming into contact with more enlightened teachers and guidance counselors, increasing exposure to more trade and craft skills, being received by employers as individuals with equal job options--all must contribute to a strengthening of the self image of women so that they can be more readily and equitably utilized in the full work force.

Women who are in the job market currently, or who are organized in unions or advocacy groups can, however, take measures to improve their own status and to help widen the job futures of others.

Recommendations to Women

1. That women themselves, with the assistance of public employment agencies, challenge existing discriminatory hiring and employment practices. Both federal and state equal opportunity laws, as well as specific apprenticeship rules, eliminate sex designation as a basis for hiring. Such suits, if valid, can have significant social repercussions

as in the Fox River Valley where, for example, a manufacturing company which was sued by EEOC in another state for sex discrimination in hiring and promoting practice has actively recruited its first female apprentice in Wisconsin.

2. That women organized within labor unions, by encouraging women applicants and bargaining for management training to be receptive to the reality of women trainees, act as advocates for the integration of women into apprenticeship positions in the skilled trades.
3. That national, state and local women's organizations continue to emphasize the social and economic need for recognition of women as individuals whose sex neither qualifies nor disqualifies them from deserving and demanding equal employment earning and training opportunities.

Recommendations to the U. S. Department of Labor

1. The strongest recommendation derived from project observations is that an apprenticeship outreach experiment should be structured to develop a technique of moving women in greater numbers toward job security--work skills and personal fulfillment through apprenticeship in a trade. Such an outreach project might have some key advantages that the Wisconsin Women in Apprenticeship Project did not:

a.) It could have a cross-agency identity of sponsorship--for example, DAT--WIN--Vocational School--AFL-CIO Women's Organization.

b.) It could concentrate on one population of females; for example, WIN enrollees; high school students in a given area; American Indian women.

c.) It could provide pre-apprenticeship coaching-training in necessary application skills.

d.) It could provide follow-up counseling once placements were made.

In effect, it could function with much the same techniques and motivation through which the LEAP programs in Wisconsin have increased the minority male participation in apprenticeship training from 30 to 300 in four years.

The project sponsors and staff are in agreement that each of the concluding recommendations, if accepted, could contribute significantly to national efforts to remove layer upon layer of employment--economic inequities affecting women and specifically deterring women from freely participating in apprenticeship.

PART TWO

METHODOLOGY AND PROJECT OBSERVATIONS ABOUT OURSELVES

1. We met less resistance when personal diplomacy was combined with observing and acting on the internal politics of an institution. It was important to size up an agency, for example, the WIN Program, to identify and cultivate the support of those who would be most receptive to the project goals. Where such personal, supportive contacts did not exist, the project's efforts were thwarted, as in the case of expanding apprenticeships in the health occupations.

   Recommendation

   That future similar projects have a degree of cross-agency sponsorship and staff representation to enhance cooperation toward common goals.

2. We were able to achieve public interest in the work of the project through having regular widespread news coverage for our activities. In addition, being personally available statewide for informational presentations to unions, employer groups, women's groups (League of Women Voters; American Association of University Women; and the Wisconsin Women's Political Caucus) was a high project priority.

   Recommendation

   That future similar projects also publicize their goals and functions through keeping a few key reporters from major news media regularly informed. That the investment in staff time for such activities be acknowledged in the research expectations and fundings.

3. The more the project extended its activities into already existing channels for dissemination of information, the more widespread became women's interest and participation. Serving as a consultant, for example, to union training programs conducted by the Wisconsin School for Workers for two years, has allowed the project access to hundreds of union rank and file men and women who are most receptive to new information and trends. Taking advantage of the newsletter of the University of Wisconsin Extension has periodically placed project-apprenticeship information in the hands of 3,500 women. Using the information dissemination network of the State Department of Public Instruction, the project reached all 459 high schools in the state with three editions of "Women in Apprenticeship News Postings."

Recommendation

That future projects consider and contact early those groups whose established networks of communication could be shared.

4. When sources of information were non-available or incomplete, the project generated its own women in employment--apprenticeship related materials. The project film, Never Underestimate the

Power of a Woman, is requested nationally far in excess of its availability. In Wisconsin, the film is regularly used in counseling enrollees by the Work Incentive Program, in training public school and parole officials by the University Extension Center for Community Leadership Development; and in the Wisconsin State Employment Service staff development sessions provided by the Women's Employment Specialist in the Bureau of Community Services, Division of Equal Rights, Department of Industry, Labor and Human Relations.

Recommendation

The project reiterates its contention that a similar high quality film depicting women performing trade skilled work should be made, aiming the style and narrative at young women whose early career choices could be affected by undoing the sex stereotyping in their view of the world of work.

5. Wisconsin Women in Apprenticeship Project staff and sponsor membership of such committees as the Governor's Commission on the Status of Women, and the State Day Care Advisory Committee to the Department of Health and Social Services has served to extend the influence of the project beyond the sponsoring agencies, the Division of Apprenticeship and Training and the University of Wisconsin Extension. For example, visible gains over existing barriers in relationship to the vocational information available in the public schools, and the

issue of veteran's apprenticeship training benefits accruing to wives, widows and orphans of veterans were made through the dual intervention of the project and the Governor's Commission on the Status of Women. Assignment of the project coordinator to represent the Department of Industry, Labor and Human Relations on the State Day Care Advisory Committee to the Wisconsin Department of Health and Social Services has helped the day care apprenticeship program to achieve statewide recognition among parents, educators, and day care providers as an effective child care personnel training program.

Recommendation

Similar projects which might be undertaken within apprenticeship agencies would increase their effectiveness and influence through collaboration with established women's advocacy groups such as the Governor's or Legislative Commission on the Status of Women in their respective states. The contact should be made early and should continue for the duration of the project.

6. The geographic separation of the project sponsors and coordinator in Madison from the sole project field representative in the target area was a distinct disadvantage in concentrating on any single goal at any one time. The tendency of the coordinator's scope of analysis and planning, taking into consideration the whole state, while the isolated field representative was limited to a defined geographical

area is cited by both as a deficiency they could not resolve. Occasional face to face contact and periodic phone conversations were not sufficient to satisfy either that she was working as an informed member of a team. Their frustration is reflected in their frequent plaint, "It's a lot of work for two people."

Recommendation

That advantages of isolating a target area be carefully weighed in future projects; that, if there is more than one researcher, they be situated so as to offer support and consultation to each other.

7. The design of the project having a dual research-demonstration thrust provided an uneasy course for the staff of two, with a tension existing between the sometimes abstract (research) and sometimes direct (demonstration) goals of the project, and the on-going, practical functions and priorities of the DAT. We were provided every courtesy of full-time staff personnel, yet often because of our commitment to change, we assumed the role of devil's advocate, and in our criticisms, seemed to be "biting the hand that feeds;" occasionally, in the minds of some permanent staff, including female secretarial staff, we were relegated to the lunatic fringe of the women's liberation movement, concerned more about the formalities of language ("journeyman"

or "journeyperson"?) than with promoting women based on their equal abilities and potential. We were never victims of maliciousness and, hopefully, we never behaved maliciously, but we knew where there had to be gentle clashes if we wanted apprenticeship's help while we rocked apprenticeship's boat. It was relatively painless for a third staff (albeit part time) female to become integrated into the Division after so much pioneering effort among male Division staff by the original project coordinator.

Recommendation

That females sensitive to and knowledgeable of the facts vs. the myths of women's past, present and potential employment contributions be engaged in apprenticeship projects which will serve to enhance the possibilities for females to gain a fair share of the apprenticeship/employment pie. Such females should expect and be prepared to be challenged in their motives and activities by both males and females in or out of the sponsoring agency.

It has not been our conscious purpose to highlight our successes and to minimize our shortcomings in this report. We wanted to relate what we did and to convey a genuine sense of optimism as we pass the project question, "Women in Apprenticeship--Why Not?" on to other states and to concerned women and men, whose responses may make a difference.

APPENDIX A

BACKGROUND APPRENTICESHIP STUDIES

1. Thomas A. Barocci, *The Drop-out and the Wisconsin Apprenticeship Program: A Descriptive and Econometric Analysis*, the Industrial Relations Research Institute, the University of Wisconsin, Madison, Wisconsin, 1972.

2. Alfred S. Drew, *Educational and Training Adjustments in Selected Apprenticeable Trades*, Vol. 1 (Lafayette, Indiana: Purdue Research Foundation), Purdue University, 1969.

3. David Farber, "Apprenticeship in the U.S.: Labor Market Forces and Social Policy," *Research in Apprenticeship Training*, Proceedings of a Conference, (Madison, Wisconsin: The Center for Studies in Vocational and Technical Education, University of Wisconsin, 1967.

NEVER UNDERESTIMATE THE POWER OF A WOMAN

Partial List of Project Film Showings

University of Hawaii - 1971 - to U.H. counselors, Employer Service Counselors, High School counselors, U.H. Continuing Education; three purchased copies of the film for wider showing throughout the state.

Interstate Association of Commissions on Status of Women - 1971 annual conference in St. Louis.

Middleton (Wisconsin) High School - 1971 - Students, teachers, counselors.

AFL-CIO Women's Conference - 1972 (Wisconsin)

Governor's Conference (Wisconsin) on Vocational Education - 1971 or 1972 Milwaukee, Wisconsin.

Great Plains Manpower Advisory Council - 1972 - Des Moines, Iowa (Five-state council).

NOW (National Organization of Women) - 1972 - Midwest Conference on Employment Opportunities for Women, Chicago. (300 women from labor and professions).

Urban Research Corp. - 1972 - National Affirmative Action Conference, Chicago.

Wisconsin High School Guidance Counselors State Convention - 1972.

Drake University (Iowa) - 1971 - Continuing Education of Women Conference

NOW - 1971 or 1972, Ames, Iowa

NOW - Buffalo, New York

NOW - 1972 - Seven State Midwest Conference, Chicago.

National Vocational Guidance Association on Vocational Training for Girls and Women - July, 1973 - Boone, North Carolina (people from 22 states).

National Personnel and Guidance Association - 1973 - San Diego and St. Louis

Wisconsin State Apprenticeship Conferences - 1971, 1972, 1973.

Ball State University (Muncie, Indiana) - 1971 - Continuing Education for Women Conference.

Wisconsin Power and Light Co. - 1973 - Affirmation Action for Service Training - several sessions.

Center for Community Leadership Development - UW Extension; uses it often in human relations workshops.

Copies for rental and purchase are available from:

BAVI (Bureau of Audio-Visual Instruction), P.O. Box 2093,
Madison, Wisconsin 53701; (608) 262-1644

Women's Bureau of U.S. Labor Department, Washington, D.C.

APPENDIX C

WOMEN IN THE TRADES:

FOX RIVER VALLEY SURVEY (SPRING 1973)

1. How many non-office employees do you have now? _____

2. How many of these are women? _____

2.a. How many apprentices do you have? _____

SKILLED

3) What skilled "blue collar" occupations are there in your plant and how many women and how many men employees do you have in each?

Skilled "Blue Collar" Occupations	No. of Men	No. of Women

SEMI-SKILLED OR UNSKILLED

4. Do you have any semi-skilled or unskilled "blue collar" occupations in which you employ?

	Occupation	No. of Men	No. of Women
a. Men and Women			
b. Men Only			
c. Women Only			

5. On the whole, do you find that men and women make equally good employees in the shop, or is this not the case?

Equally good (to question 6)	Not the case	Depends

5.a. Why do you feel this way? ______________________________

____

____

6. With respect to the specific aspect of work that I will read, do you think that men are better, there is no difference, or that women are better?

	Men Better	No Difference	Women Better
6a. First, production	______	______	______
6b. Absenteeism	______	______	______
6c. Turnover......................	______	______	______
6d. Ability to get along with fellow workers	______	______	______
6e. Willingness to accept supervision	______	______	______
6f. Acceptance of various work conditions....................	______	______	______
6g. Making constructive suggestions for production improvement..................	______	______	______

(Write any further comments here)

MALE SUPERVISORS

7. How many male supervisors do you employ? _____

8. How many of your male supervisors supervise men only? _____

9. How many of your male supervisors supervise women only? _____

10. Are there any sections or occupations for which you prefer men supervisors?

Yes _____ No _____
(to question 11)

10a. What are these?

Sections or Occupations

____

____

____

____

10b. Why do you prefer men supervisors for these occupations?

____

____

____

____

WOMEN SUPERVISORS

11. How many women supervisors do you employ?

None _____(Number)
(to question 12)

11a. How many of your women supervisors supervise men only? _____

11b. How many of your women supervisors supervise women only? ___

11c. Do your male workers accept women supervisors as well as they accept men supervisors?

Yes _____ Depends _____ No _____

11d. Do your female workers accept women supervisors as well as they accept men supervisors?

Yes _____ Depends _____ No _____

11e. Are there any sections or occupations for which you prefer women supervisors?

Yes _____ No _____
(to question 12)

11f. What are these?

Sections or Occupations

____

____

____

____

11g. Why do you prefer women supervisors for these occupations?

____

____

____

____

12. Have you had a woman applicant for an apprenticeship in the past five years?

Yes _____ No _____
(to question 13)

12a. Was she already employed by you?

Yes _____ No _____

12b. Did she meet your qualifications?

Yes _____ No _____

12c. In what trade? ______________________________

12d. If no, why not? ______________________________

12e. What trade ______________________________

12f. Did you hire her as an apprentice?

Yes _____ No _____

12g. Did she complete her training?

Yes ____ (to ques. 13) No ____

Why not? ____________

____

____

12h. Why didn't you hire her?

____

____

____

____

____

13. Are there any apprenticeable occupations in which you would hesitate to consider a woman?

Yes ____ No ____ (to question 14)

13a. Which occupations are these? ____________

____

13b. Why? ____________

____

____

____

14. Are there any jobs in your shop that no woman could possibly do?

Yes ____ No ____ (to question 15)

14a. Which jobs? ____________

____

14b. Why not? ____________

____

15. Why do you think there are so few women in the skilled trades?

____

____

____

____

16. Are there any skilled trades that you think women might be particularly suited for?

Yes ________ Depends ________ No ________ (to question 17)

16a. What would these skilled trades be? ____________________

16b. Why do you think women would do well in these trades? ____________________

17. Have you had any difficulty filling any apprenticeship openings with good quality candidates?

Yes ________ No ________ (to question 18)

17a. In what occupations have you had difficulty? ____________________

17b. What do you feel are the reasons? ____________________

18. Have you had any difficulty filling any skilled job openings?

Yes _____ No ______ (to question 19)

18a. In what trades has this happened? ____________________

18b. What are the reasons, as you see it? ____________________

19. Would you consider hiring a skilled woman if she were available for a 6-hour day, 30-hour week?

Yes ______ No ______

19a. Or part time?

Yes ______ No ______

20. Where do you get your apprentice applicants?..(anywhere else?)

____

____

____

21. When you have an apprentice opening, do you first advertise it to inplant employees?

Yes ______ Depends _____ No ______

22. Do you post apprenticeship openings on company premises?

Yes ______ Depends _____ No _____
(to question 23)

22a. Do you post these openings where both production and office employees may see them?

Yes ______ No ______

22b. Do you post them where both male and female employees may see them?

Yes ______ No ______

23. Approximately how old are your apprentices when they start?

18 - 24 25 - 30 31 - 35 Over 36

24. What is the maximum age for which you will accept apprenticeship applicants?

_______(age)

25. Would you extend this age limit for...

25a. Veterans? Yes _____ No _____

25b. Women who have completed their families? Yes ____ No ____

25c. Employees? Yes _____ No _____

25d. Anyone else? (who?) No ______________________________

____

26. a. Do you have any women doing jobs in your plant that:

b. Do you know of any woman doing jobs elsewhere that:

	26a. IN YOUR PLANT	26b. ELSEWHERE
Are "dirty"..................		
Are "out in the elements"...		
Are noisy		
Are "messy"..................		
Work with dangerously hot materials.............		
Involve lifting.............		
Precision work..............		
Have irregular hours (or shifts).............		
Require mechanical aptitude.		
Require mechanical skill and experience............		
Require technical ability..		

27. Did you (as an individual) respond to this survey in 1970?

Yes ______ No ______

28. Do you have any further comments or suggestions?

HOW TO BECOME AN APPRENTICE

An apprenticeship is a job with a built in formal training agreement involving both on-the-job training and related classroom instruction relevant to that job at the local vocational school.

An apprentice earns while he/she learns. The term of apprenticeship may vary from 2 to 5 years but this is not unpaid time for an apprentice receives wages and regular raises. Wages in the various trades vary.

STEPS

1. The procedure varies from trade to trade, town to town.

   The first step is to select a trade.

   There are currently 370 apprenticeable occupations. A list of these may be obtained from the Division of Apprenticeship and Training, 201 East Washington Avenue, Madison, Wisconsin 53703 or from the Wisconsin State Employment Service. New occupations are regularly approved. The criteria for approval is the level of skill of the job and course work and the presence of a skilled worker (journeyman) to teach and supervise.

2. Remember, looking for an apprenticeship is like looking for a job.

   The second step is to contact one of the following:

   JOINT APPRENTICESHIP COMMITTEE (JAC)
   If you want an apprenticeship in the construction trades, you would usually contact the JAC of the trade. This committee keeps a waiting list of those applicants who have passed the tests and interviews. Look in the Yellow Pages to find the appropriate craft union or labor temple and ask about the JAC.

   EMPLOYER
   You would usually apply directly to the employer or the personnel office. Apprenticeship openings are sometimes listed with the Employment Service, vocational school or the help wanted column in the newspaper.

   Large industrial plants often have a bargaining agreement with the union that makes apprenticeship open only to workers already employed in their unskilled labor pool.

   Often the best chance to obtain an apprenticeship is to find an employer willing to hire you and then persuade him afterward to give more skilled training.

Chances to become highly skilled workers in the various trades are a premium even in times of full employment--there are almost always more applicants than openings--and a young person may have to look hard to find an opportunity or have to wait for it, but it's worth it!

ARE YOU LOOKING AT SEX INSTEAD OF SUITABILITY?

Don't risk your chance of success

AS AN EMPLOYER	AS A WORKER
by limiting...	
your pool of training candidates	your choice of a career

because of outmoded myths about "men's work" or "women's ability"...

judge workers as individuals	never underestimate the power of a woman

contact:

Department of Industry, Labor
and Human Relations
Apprenticeship and Training
Division
P.O. Box 2209
Madison, Wisconsin 53701
(608) 266-3331

how about women?

DID YOU KNOW...

31 million women are employed, yet two-thirds are in dead end, menial jobs?

40% of all employed women have no husbands?

Half of all employed women earn less than $4,450?

10% of all families are headed by women? Half of these live in poverty?

Women with college degrees earn about the same as men with grade school educations?

The wife's earnings often lift the family above the poverty level?

The high cost of welfare, with the dramatic increase in families on AFDC, might be cut if more women received skilled training?

TODAY'S TRENDS

The trend is toward greater sharing of work and leisure.

MEN are entering the labor force later because of longer schooling and they also are retiring earlier than in the past.

The average work week is growing shorter.

WOMEN are working in larger numbers and are a greater proportion of the work force than ever before. Nine out of ten young women will be employed some time in their lives.

Employment of MEN has increased by 7.8 million since 1947 -- and employment of WOMEN by 13 million.

Women are now more than one-third of the work force.

"MEN'S JOBS" AND "WOMEN'S JOBS" ARE GOING THE WAY OF THE DINOSAUR...

There are now MEN
librarians
social workers
teachers
nurses
cosmetologists
dental hygienists
secretaries

There are now WOMEN
mechanics
carpenters
machinists
operating engineers
watchmakers
barbers
basketball coaches

APPENDIX F

Learning and Earning: Wisconsin Women in Apprenticeship *

INTRODUCTION

Everyone needs to be able to make a good living. But you don't have to go to college to do it. One way to gain job security and an interesting life is through apprenticeship.

As an apprentice you earn money while you learn a valuable skill. Your employer pays you for your work, and pays for your education too. You come out of your apprenticeship with a "ticket" to a good job almost anywhere, since the journeyperson rating which you receive after successfully completing your apprenticeship, is widely recognized as testimony to good job performance and skill.

More and more, young women of today are realizing life almost always includes work, even though it may include marriage. Most young women, in fact, will work at least 25 years of their lives, according to Department of Labor figures.

If married, you may wish to earn a good salary to help supply some things American families need today--including a good education for the children you may have some day. If unmarried, you will find that a good job which requires skill and training and rewards that skill and training very well will give you not only economic independence but pride and satisfaction as a member of the busy and productive world of work.

Here in this booklet you will see what some Wisconsin women are doing as apprentices. Wisconsin now has at least 23 apprenticeships available to young women as well as to young men.

Look them over. Some will strike you as especially interesting. You can find out more about them by asking your guidance counselor, by asking union people and employers who have apprenticeship programs in your own area, or by contacting the Wisconsin State Employment Service.

Our society now needs more highly-skilled people than it has. You can be one of them. Don't settle for too little in life, too late.

Unskilled work gets duller as the years go by, but skilled work gets more interesting and wins for the worker a better life.

Start now. Look through these pages. See which of these apprenticeships appeals to you, and follow through on this idea. See what an apprenticeship can do to help you build a happy and productive life.

---

* Printed courtesy of the Milwaukee Sentinel and Dorothy Austin, feature writer.

UNCONVENTIONAL MOTHER TURNED CARPENTER

"If I could sit down and make a list of everything I want, I've almost got it," said Pat Anthony.

The Fond du Lac, Wisconsin woman, 32, was talking about her chosen field, carpentry. She is on the waiting list for an apprenticeship and hopes to be accepted within a year or eighteen months.

"When I am building something, I am completely happy," Ms. Anthony said in an interview. Now she is on the way to achieving her ambition to be a residential carpenter and assist in the building of homes. Like many of us, she was not always so sure of what she wanted. She dropped out of high school at sixteen to marry. Ten years later her husband was killed in an automobile accident and she was left with three children.

She realized then that she would have to create a whole new future for herself and her family. And she would have to start by finishing high school.

Under a new adult education program she obtained her high school diploma at St. Mary's Springs High School. It was at the school, in an industrial arts class, that she discovered that she liked to build things with hammer and saw.

"I like to build and do outdoor work," she said. It has nothing to do with women's lib, she maintained. She added that she once tried office work for six months and "almost died" of boredom and frustration.

While she entered the regular high school program during the day, she took night classes in drafting, advanced drafting and blueprint reading at the Moraine Park Technical School.

Then she passed her carpentry apprenticeship test and appeared before the Fond du Lac Carpenters Joint Apprenticeship Committee. Now she is on the waiting list for an apprenticeship and the estimate is that she will be able to enter the program in the near future.

So far, she has had "absolutely no static" from friends and neighbors, who find that it is helpful indeed to have a skillful woman in the neighborhood to help out occasionally with a household project.

Ms. Anthony lives and guides her family with very strict rules. She buys the food and does 75% of the cooking, and the children, 14, 12 and 10, do the serving and cleaning up. She designs the meals and does the laundry, but they put the clothes away. Her system works.

And now that she is on the way to the kind of job she can thoroughly enjoy, she feels that "the best of all possible worlds" for her is in the exciting future that lies ahead.

NEW DRAFTING APPRENTICE

A surprise career is opening up for Mary B. Cubjati, Milwaukee. Ms. Cubjati, 22, is an apprentice in structural drafting at Harnischfeger Corp., 4400 W. National Ave.

It was a surprise to her because she had never thought of the possibility in her years at Pius High School. She was graduated in 1968.

"If I had thought of it, I would have prepared myself better," she said in an interview.

She enjoyed her four years of art classes in high school, but nothing really prepared her for what she is doing now. She is learning on the job, and taking classes one day a week at Milwaukee Area Technical College, and is drawing the apprentice wage while she learns.

Ms. Cubjati said that she heard that Harnischfeger Corp. was looking for a female apprentice. She called the personnel department and went in for an interview. "I knew absolutely nothing about it," she said, "but I was really interested."

Three days later, she received a telephone call saying that the job and apprenticeship were hers. That was September 5, 1972.

After a few months on the job, she still feels occasionally that she knows little or nothing about structural drafting, but at other times feels that she has been learning a great deal and is making good progress.

"Right now I am doing mostly tracings and changes on some of the drawings, to get me familiar with working on drawings," she said.

She must have had some latent talent all the time, she says, and is happy to have the opportunity to develop it. "Some days I am proud of myself," she said.

She is now the only apprentice in the department, and the others, all men and all professionally qualified, go out of their way to be helpful.

She spends one day a week at Milwaukee Area Technical College in classes. Again she is the only woman. Here the atmosphere at times is a little "stiff" as she puts it.

"There is a small group of men who may resent my being there," she said, "because I get the feeling now and then that I am intruding, somehow."

But she is determined to do her best and to succeed. "No way will I give up," she said.

Her boss, Frank Noruk, Director of Apprenticeship and Training, declared he was pleased with her progress.

"In this job she will be required to help lay out new buildings, and even to help furnish them. She will also help in laying out the remodeling of old buildings," Noruk said.

He consulted with Milwaukee Area Technical College representatives in designing the special curriculum for the new apprentice, so that she would take the courses she needs and skip those she does not need.

In addition, on her own, she is taking interior decorating courses at night to add to her background. She feels she is on her way to a productive and satisfying career.

A NICHE IN PRINTING

After ten years in the world of work, Ms. Lorraine Brinza feels that she has found her niche. An attractive, career oriented woman, she is an apprentice lithographic stripper. May it be said to the everlasting credit of the men with whom she works, there has been no chortling over the stripper title. After all, men are lithographic strippers, too, and nobody says "ho, ho, ho" about that.

Ms. Brinza worked in the art department of Moebius Printing Co., Milwaukee for two years, and then applied for the lithographic stripping job. She got the job, worked a probationary six months, and then was accepted by the union, Lithographers and Photoengravers International Union, Local No. 277.

Ms. Brinza looks and sounds like everything that is called "feminine." But she does not like what she has seen happen to some of her friends. "They marry right out of high school, have children right away, and do not have a chance to develop a personality, likes and dislikes of their own. Their husbands grow and develop skills, but they stay the same," she said.

She is proud of her newfound craft. "It has just enough of the artistic to suit me," she said. As a girl in Cudahy High School she enjoyed art courses, but felt she was not gifted enough to be an artist. She looked for a niche in one of the allied fields and found that she liked the printing industry.

"I have enough flair for making things look the way you want them to," she said.

Now she has finished two years of a five-year apprenticeship. She has attended classes at Milwaukee Area Technical College for three semesters, and has one semester to go. After that, her training will continue on the job.

Ms. Brinza recalled that she felt nervous when she went before the union. "But when I went before the entire board, they were completely courteous," she said. "They just wanted to know if it was really what I wanted to do," she said. It was. To her printing offers a lifetime calling.

She considers that printing is a "marvelous industry," with "so many open doors," and many possibilities for the future.

She is looking forward to the day when she can qualify for the journeyperson's card. "With that, you can go anywhere you want and you will be accepted for your skill rather than your gender," she said.

At the beginning of her apprenticeship, she made $3.32 an hour. By the end of the apprenticeship she will make a journeyperson's rate of over $7 an hour.

She is married to Emil Brinza, who is self-employed as a custom automobile painter. "My husband is satisfied with my working and I enjoy working," she said.

APPRENTICES BECOME DAY CARE TEACHERS

If you like young children, you might like to make a career out of helping them in their vitally important early years.

Since more and more mothers are working, either as the partial or sole support of their families and as the educational needs of preschool children are recognized day care centers are becoming more and more important.

Skilled workers are very much needed in day care centers all over the country. Although there have been many avenues to such work, the two principal routes are either a degree in early childhood education or an apprenticeship. For many thousands of young men and women interested in the development of children, the apprenticeship route is the most satisfactory since it permits earning a living while learning the necessary theory and skills.

In July 1972, two Madison mothers, both the sole support of their children, became the first to receive certificates testifying that they completed their two-year day care teacher apprenticeships.

Because they had worked several years in day care centers, they received a year of credit for their work and thus required only one year to complete their apprenticeships.

Ms. Mary Matthews is now lead teacher-director of the South Madison Day Care Center, and Ms. Doreen Morton is an associate teacher at the same center.

Now about 85 women and a few men are enrolled in day care teacher apprenticeship programs in many parts of the state, including Madison, Janesville, Oshkosh, Ashland, Milwaukee, and Superior.

As a day care teacher apprentice you would learn on the job, with the guidance of experienced teachers and directors, and you would also receive 288 hours of related instruction in classes specifically designed to help you with your work.

Your beginning salary would vary from one part of the state to the other, depending on the pattern in the community, but would usually range from $1.60 to $2 per hour. Upon being awarded the apprenticeship certificate by the Division of Apprenticeship and Training, however, your salary would compare favorably with that of other qualified teachers.

APPENDIX G

VTAE SURVEY - March 1973

School District and Location ______________________________

1. How many women do you have enrolled in trade and industrial education courses in your district at the present? (Do not include apprenticeship related instruction classes.)

	Number	
Which classes?	Male	Female
Graphic Arts		
Mechanical Design		
Drafting Mechanical		
Other:		

2. Do you have any comments to make as to:

A. Why so few women apply (if that is the case) in vocational school courses for skilled trades?

B. How those women who have enrolled have succeeded?

C. Suggestions for skilled occupations that you think women might take up successfully?

D. What might be done to increase the numbers of women in trade and industrial courses in vocational schools?

News

IN DAY CARE APPRENTICESHIP.

WISCONSIN
DEPARTMENT OF INDUSTRY,
LABOR AND HUMAN RELATIONS

Division of
Apprenticeship and Training
P. O. Box 2209
Madison, Wisconsin 53701

CHILDREN NEED YOU
EMPLOYERS NEED YOU
SOCIETY NEEDS YOU

WHY?

To begin with, there are more parents working than ever before. Their children require competent, kind and qualified individuals to provide day care: to offer a broad range of experiences to children and to understand and appreciate what makes them tick.

Licensed day care centers are trying to provide this service. The providers are keenly aware that the work they do requires sensitivity and skill. They need men and women - day care teachers and teacher's assistants in whom children, parents and society can place their confidence. These individuals are not super-human, and they grow in skill from their daily experiences with children and from continual exposure to ideas, facts, and concepts about children.
ARE YOU INTERESTED IN BECOMING A DAY CARE TEACHER?

HOW?

This is where the Day Care Teacher Apprenticeship Program in Wisconsin is ready to help. Day care employers - agencies, boards and individual propriators - are encouraged to employ men and women who can learn to be skilled day care teachers via apprenticeship. The apprentice works with an experienced teacher (journeyperson) and receives weekly related instruction for a two year period. The apprentice earns a salary, and learns from both on-the-job training and from the related instruction. Application for apprenticeship is made by both the employer and employee. A local committee made up of day care propriators and teachers assists in determining who can have an apprentice as well as who can be one. Both the applicant and the employer must meet minimum entry standards.

WHO DOES WHAT?

Once the application is approved an agreement (indenture) is written between the Division of Apprenticeship and Training, the employer and the apprentice. Salary increases, on-the-job training and related instruction are provided according to the agreement, for a two year period. The employer provides salary and on-the-job training while the Vocational, Technical and Adult Education system is responsible for providing related instruction.

WHERE DO FINANCIAL AIDS ORIGINATE?

In many cases employers are eligible for reimbursements and for a tax credit of 20% of wages paid in the first year of employment of the apprentice. The Work Incentive (WIN) and Jobs Optional Programs (JOPS) are the funding sources. WIN enrollees are encouraged to consider apprenticeship as a means of attaining their employment goals.

AFTER APPRENTICESHIP?

The graduate apprentice may be retained as a valuable, experienced staff member (journeyperson) who has had broad training and exposure to the intricacies involved in providing day care services.

WHO BENEFITS?

The apprentice has recognition and a career.
The employer has a built-in training program.
The children thrive - learn and grow.
And society can say "thanks".

****

For more detailed information, write or call:

Dept. Of Industry, Labor and Human Relations
Division of Apprenticeship & Training
310 Price Place, Box 2209
Madison, Wisconsin 53701
(608) 266-3331

or contact any of the following apprenticeship offices:

APPLETON OFFICE
1825 N. Bluemound Dr.
Appleton, WI 54911
(414) 739-1423

EAU CLAIRE OFFICE
620 W. Clairemont, Ave.
Eau Claire, WI 54935
(715) 834-3171

GREEN BAY OFFICE
200 S. Broadway
Green Bay, WI 54303
(414) 435-6343

KENOSHA OFFICE
3520 30th Avenue
Kenosha, WI 53140
(414) 658-4371

LACROSSE OFFICE
6th St. Vine to Pine
Lacrosse, WI 54601
(608) 782-6238

MILWAUKEE OFFICE
819 N. Sixth Street
Milwaukee, WI 53203
(414) 224-4398

SHEBOYGAN OFFICE
843 Jefferson Ave.
Sheboygan, WI 53081
(414) 458-4183

SUPERIOR OFFICE
805 Belknap St.
Superior, WI 54880
(715) 394-6556

WAUSAU OFFICE
1000 Schofield Ave.
Wausau, WI 54401
(715) 675-3331

****

August 15, 1972

APPENDIX I

_____ _____Office Number
Project 552
September, 1972

University of Wisconsin-Extension
Wisconsin Survey Research Laboratory

WOMEN IN APPRENTICESHIP

1. We're interested in how people find out about apprenticeship training programs. Who first suggested apprenticeship training to you?

NAME	TITLE OR RELATIONSHIP

2. Approximately what month and year was this? (MO.)____________________, 19___

3. What was the one main factor that led you to become an apprentice?

____

____

4. You may have already told me, but which one of the factors I'll read was strongest in helping you to decide to become an apprentice? (READ LIST;CHECK ONE)

_____A. Financial security
_____B. Interest in gaining trade skills
_____C. Someone else thought it was a good idea
_____D. To be able to move from one place to another
_____E. To get a recognized certificate
_____F. Other:(Specify)____

5. Thinking back, how would you rate your initial expectations of the apprenticeship program . . . were they high, moderate, or low?

/High/ /Moderate/ /Low/ /Didn't care/

6. Had you had any general work experience in the occupation before you became an apprentice?

/Yes/ /No/

7. Had someone in your family or a friend been an apprentice?

/Yes/ /No/ (TO Q 8)

7a. Who? ____(RELATIONSHIP)

Interviewer:______________________________ Date:__________ Sample #:__________

8. Did you meet any resistance, by that we mean criticism or unfavorable comments and lack of cooperation from your family, friends, or co-workers when you first decided to become an apprentice?

/Yes/ /No/ (TO Q 9)

8a. Please explain what the resistance was and who it came from? ____________

____

____

9. While you were an apprentice, did you generally have friendly daily relationships with co-workers?

/Yes/ (TO Q 10) /No/

9a. In what way were they not friendly? ____________

____

10. At the time you began apprenticeship, could you financially have afforded full-time schooling?

/Yes/ /No/

11. What was your beginning salary as an apprentice? $________ per ________, or

____

12. Were you satisfied with this salary? /Yes/ /Depends/ /No/

13. How did this beginning salary compare with any previous salary you had received... was it higher, the same, or lower?

/No previous work/ /Higher/ /Same/ /Lower/

14. Were there periodic raises? /Yes/ /No/ (TO Q 15)

14a. Were you satisfied with these raises? /Yes/ (TO Q 15) /Depends/ /No/

14b. In what way were you dissatisfied? ____________

____

15. Was a skilled person or one of journeyman rank working closely with you?

/Yes/ /No/ (TO Q 16)

15a. Was the journeyman-apprentice relationship satisfactory? /Yes/ (TO Q 16) /No/

15b. In what way was it unsatisfactory? ____________

____

16. Other than a journeyman, was there ever a shop manager or supervisor at the employment site who worked with you?

/Yes/ /No/

17. Did you have satisfactory communication with your manager or supervisor?

/Yes/ (TO Q 18) /No/ ↓

17a. Why not? ____

____

18. Did you receive fair treatment from your employer as far as sick leave, fringe benefits, and so forth?

/Yes/ (TO Q 19) /No/ ↓

18a. In what way did you not? ____

____

19. Were other females employed on the job site? /Yes/ ↓ /No/ (TO Q 20)

19a. Were they employed in trade skilled work? /Yes/ /No/

20. Were other apprentices present at the job site? /Yes/ ↓ /No/ (TO Q 21)

20a. About how many other apprentices? ____________(#)

20b. About how many were females? ____________(#)

21. Had there been a female apprentice employed at your job site previous to your employment?

/Yes/ /No/ /Don't know/

22. Did you consider the work personally rewarding or not?

/Yes/ (TO Q 23) /No/ ↓

22a. Why not? ____

____

23. Were there any physical aspects of the job that you found too difficult ... such as heavy lifting or standing for long hours?

/Yes/ ↓ /No/ (TO Q 24)

23a. Could you explain? ____

____

24. As an apprentice, do you feel you were given too many menial and distasteful jobs?

/Yes/ /No/ (TO Q 25)

24a. What were these jobs? ____________________

____

25. Were you satisfied that the "on-the-job training" portion of your apprenticeship actually trained you in the required skills?

/Yes/ (TO Q 26) /No/

25a. What was lacking? ____________________

____

26. Did your employer fulfill the expectations you had for your progress in gaining skills?

/Yes/ (TO Q 27) /No/

26a. What was lacking? ____________________

____

27. Who encouraged you the most during your apprenticeship experience?

____________________(TITLE OR RELATIONSHIP)

28. Was classroom related instruction for apprenticeship provided? /Yes/ /No/ (TO Q 29)

28a. Did you attend this related instruction always, most of the time, only some of the time, or never?

/Always/ /Most/ /Some/ /Never/

28b. Who provided the related instruction--your employer, vocational school, consultants, or others?

/Employer/ /Voc. School/ /Consultant/ Other:(Specify)____________________

28c. Were you paid while you attended related instruction classes? /Yes/ /No/

28d. Were you satisfied with the content of the related instruction? /Yes/ /No/

28e. What was the attitude of the instructor toward you as an apprentice ... was it favorable, neutral, or unfavorable?

/Favorable/ /Neutral/ /Unfavorable/

28f. As you were studying, how would you rate your progress in related instruction...was it above average, average, or below average?

/Above/ /Average/ /Below/

29. When you entered the apprenticeship program, did your contract or indenture give you credit for previous schooling?
/Yes/ /No/

30. . . . for previous work experience? /Yes/ /No/

31. While you were in the apprenticeship program, were you aware of standards governing such things as the length of time spent on various work processes, the obligations of employers, and so forth, as stated in your contract or indenture?
/Yes/ /No/
(TO Q 32)

31a. While you were an apprentice, were you aware of apprenticeship committees which help to make or change apprenticeship rules or standards?
/Yes/ /No/

32. Do or did you know how or whom to contact in the Wisconsin Division of Apprenticeship Training if you needed help or advice?
/Yes/ /No/

33. Did you ever participate in any activity such as local or state apprenticeship committees where you could voice your opinions about your apprenticeship experience?
/Yes/ /No/
(TO Q 34)

33a. Do you believe you should have participated in this way? /Yes/ /No/ /DK/

34. Thinking of apprenticeship programs in general, do you feel that the public highly respects them, somewhat respects, or has a low respect for them?

/Highly/ /Somewhat/ /Low/ /No opinion/

35. . . . how about employers? /Highly/ /Somewhat/ /Low/ /No opinion/

36. When you began your apprenticeship, did you expect to complete the program?
/Yes/ /No/ /Don't know/

37. Have you terminated the apprenticeship program? /Yes/ /No/
(TO Q 43)

37a. Did you graduate, was your contract suspended, canceled, or what?

/Graduated/ /Suspended/ /Canceled/ Other:(Specify)____________
(TO Q 38)

37b. Would you explain? (ASK: WHY? PROBE FOR DETAILS) ____________

____

____

____

37c. Do you have plans to re-enter apprenticeship in the same occupation within the next 5 years?

/Yes/ /No/

37d. Are you considering re-entering but in another occupation? /Yes/ /No/

37e. Would you have continued the apprenticeship program if someone had encouraged you?

/Yes/ /No/

38. Are you presently employed outside your home or are you a full-time homemaker?

/Employed/ /Full-time homemaker/

38a. What is your occupation? (TITLE AND DUTIES)

____

____

____

38d. Are you satisfied with what you are doing?

/Yes/ /No/
(GO TO Q 39)

38b. What is the name of the company or agency? ______________________________

____

38c. Is your salary now higher, the same, or lower than when you were an apprentice?

/Higher/ /Same/ /Lower/

39. Did the apprenticeship training help you to get a job? /Yes/ /No/

40. Did you ever become discouraged with the apprenticeship program?

/Yes/ /No/
(TO Q 41)

40a. Why? ______________________________

____

41. Do you still have some contact with any of your apprenticeship co-workers?

/Yes/ /No/

42. Do you still have some contact with your apprenticeship employer? /Yes/ /No/

43. While you were an apprentice, did or do you have off-the-job social contacts with co-workers?

/Yes/ /No/

44. During your apprenticeship, was transportation to and from work a problem for you?

/Yes/ /No/ (TO Q 45)

44a. Why? ____________________

____

45. Would you recommend the apprenticeship system to another woman? /Yes/ /Dep/ /No/

46. Now I have just a few background questions which will help us interpret the results of this survey--first, how old are you?

________(AGE)

47. What is the highest grade of regular school or year of college you completed?

_____(GRADE OF SCHOOL) OR _____(YEAR OF COLLEGE)

48. Beside the apprenticeship, what, if any, other vocational training do you have?

/None/, or ____________________

____

49. Are you the main support of your immediate family? /Yes/ /No/

50. Are you presently married, widowed, divorced, separated, or have you never married?

/Married/ /Widowed/ (TO Q 51) /Divorced/ (TO Q 51) /Separated/ (TO Q 51) /Never married/ (TO Q 51)

50a. Is your husband employed now? /Yes/ /No/ (TO Q 50c)

50b. What is his occupation? ____________________

____

50c. How did your husband react to your involvement in the apprenticeship program...was it favorable, unfavorable, or didn't he care one way or the other?

/Favorable/ /Unfavorable/ /Didn't care/

51. How many children do you have and what are their ages?

/None/, (TO Q 52) or ________(#) (AGES) __ __ __ __ __ __ __ __ __ __

51a. In order to be employed outside the home, do you require child care for pre-school children?

/Yes/ /No/

51b. Do you require child care for before or after school hours? /Yes/ /No/

51c. Have you usually had satisfactory child care arrangements while working?

/Yes/ /No/ /Inap/ (TO Q 52)

51d. What were they? ______________________________

____

52. How would you rate your health and stamina during your apprenticeship term . . . was it excellent, good, fair, or poor?

/Excellent/ /Good/ /Fair/ /Poor/

53. Did you experience any unusual health related difficulties when you were an apprentice?

/Yes/ /No/ (TO Q 54)

53a. What were they? ______________________________

____

54. While you were an apprentice, were you absent from work because of pregnancy related reasons?

/Yes/ /No/ (TO Q 55)

54a. Did you receive any maternity leave benefits? /Yes/ /No/

55. While you were an apprentice, were you absent from work frequently, occasionally, seldom, or never?

/Frequently/ /Occasionally/ /Seldom/ /Never/

56. . . . were you late to work frequently, occasionally, seldom, or never?

/Frequently/ /Occasionally/ /Seldom/ /Never/

57. Have you ever received any public financial assistance such as AFDC, WIN Program Fund, or other government sponsored programs?

/Yes/ /No/ (TERMINATE)

57a. About when was this? FROM: (MO.)__________, 19___ TO:(MO.)__________, 19__

Thank you.

COMMENTS: ______________________________

____

____

____

____

METHOD OF CALCULATION OF MALE DROP-OUT RATE
WISCONSIN APPRENTICESHIP

For the period 1970-72, the sample is the new admittance of 2,700 males each year into appreniceship programs. The drop-out total from those enrollees is 900 per year (300 suspensions not included). This gives a drop-out rate of 1/3 = 33%. In this model, we assume that all those suspended eventually reapply and so graduate.

Realistically, we must assume around 50% never reapply. About 300 a year are suspended and we therefore assume 150 of those drop out. The drop-out rate becomes:

$$\frac{900 + 150}{2700} = \frac{1050}{2700} = 39\%$$

or if they all drop out:

$$\frac{900 + 300}{2700} = \frac{1200}{2700} = \frac{4}{9} = 44.5$$

NOTE: In arriving at the female apprenticeship drop-out rate of 24% for the same period, we necessarily defined all suspensions as drop-outs.

APPENDIX K

Project 580
March, 1973

University of Wisconsin-Extension
Wisconsin Survey Research Laboratory

WISCONSIN WOMEN IN APPRENTICESHIP

QUESTIONNAIRE FOR CURRENT OR FORMER EMPLOYERS OF APPRENTICES

Name of Person Completing Form: ______________________________

Position: ______________________________

Relationship to Apprentice: ______________________________

Trade or Occupation: ______________________________

Date Questionnaire Completed: ______________________________

The following questions refer to your experience with the apprenticeship program during the period of July 1, 1970 to June 30, 1972. (See attached letter)

1. In what month and year did you first employ female apprentices?

   ____________(MONTH), 19 ____

2. Between July 1, 1970 and June 30, 1972, how many female apprentices began your apprenticeship program? ________(#)

3. Of this number (Question 2), how many completed the program?

   _____None, or ________(#)

4. How many of these (Question 2) are currently continuing in apprenticeship?

   _____None, or ________(#)

5. How many of these (Question 2) have dropped (cancelled or suspended)?

   _____None, or ________(#)
   (TO QUESTION 6) ↓

   5a. For any apprentices with your organization who dropped out of the program (cancelled or suspended), what do you believe to be the reasons for their not completing? ______________________________
   ____
   ____
   ____

6. Do apprentices in your organization usually have a one-to-one working relationship with either a skilled person or one of journeyperson rank?

   _____Yes _____No

7. Have apprentices expressed job-related needs which a counselor or close work associate could help solve?

_____Yes _____No

8. Is either a skilled person or journeyperson available to apprentices as needed for such counselling?

_____Yes _____No

9. Have you or anyone in your organization requested guidance for apprentices from an outside agency (WIN, Division of Apprenticeship and Training)?

_____Yes _____No _____Don't know

10. If you need consultation or guidance in your apprenticeship program, do you know whom to contact in the Division of Apprenticeship and Training?

______Yes ______No

11. With reference to apprenticeship, have you received consultation from the Division of Apprenticeship and Training when you requested it?

_____Yes _____No _____Never requested

12. Are you planning to continue to train female employees through apprenticeship?

_____Yes _____No _____Not sure

13. If any, what are the most positive aspects of your experience with female apprentices? _____None, or ______________________________

____

____

14. If any, what are the most negative aspects of your experience with female apprentices? _____None, or ______________________________

____

____

15. Was related classroom instruction available for your apprentices?

_____Yes _____No
(TO QUESTION 16)

15a. Who was responsible for providing related instruction?

_____Vocational system _____Consultants

_____Other (PLEASE SPECIFY): ______________________________

16. Did all, some, or none of the female apprentices attend related instruction classes? _____All _____Some _____None _____Classes not available

17. Were you satisfied with the results of the related instruction?

_____Yes (TO QUESTION 18) _____No

17a. Why not? ______________________________

____

____

18. Generally, did the apprentices have a good working relationship with the other employees?

_____Yes (TO QUESTION 19) _____No _____Don't know (TO QUESTION 19)

18a. Why not? ______________________________

____

____

19. Did the female apprentices meet your expectations for on-the-job performance?

_____Yes (TO QUESTION 20) _____No

19a. In what way did they not? ______________________________

____

____

20. Did you receive any funds (for example: Federal Manpower Development Training Funds) because you had (or have) apprentices?

_____Yes _____No (TO QUESTION 21)

20a. Was the availability of such funds a motivating factor in your participation in on-the-job training for female apprentices?

_____Yes _____No

21. Would you hire a female with journeyperson standing who was an apprentice with another employer in your trade? _____Yes _____Depends _____No

22. Which of the following describes the average monthly attendance record of the female apprentices? _____90% attendance or better _____About 60% - 80% _____About 50%

23. In general, were apprentices late to work frequently, occasionally, seldom, or never? _____Frequently _____Occasionally _____Seldom _____Never

24. For what reasons did your organization decide to train female apprentices initially? (Please be as specific as possible.)

____

____

____

____

____

25. How often did the supervisor spend time in conference with the apprentices?

_____Weekly _____Monthly ____Bi-weekly _____As necessary _____Not at all

26. Did (or do) the apprentices socially participate with the other employees?

_____Yes ↓ _____No ↓ _____Don't know (TO QUESTION 27)

26a. In what activities? (For example: bowling team, bridge)

____

____

____

____

26b. Why do you think they did (or do) not socialize more?

____

____

____

____

27. How do you rate the on-the-job motivation of the female apprentices as compared with other employees? ____Higher ____The same ____Less

28. Did the apprentices receive salary increments at fixed intervals?

_____Yes _____No

29. Have you ever recommended training female apprentices to another employer in your trade? _____Yes _____No

30. Would you--in the future--ever recommend training female apprentices to another employer? _____Yes _____Depends _____No

31. Have more females applied for apprenticeship than your organization could employ as apprentices? ____Yes ↓ ____No (TO QUESTION 32) ____Don't know (TO QUESTION 32)

31a. If yes, about how many applied who could not be employed as apprentices? _____(#)

32. Was (or is) your organization represented on any advisory committees which help to determine apprenticeship standards? (For example: Joint Apprenticeship Committee or Apprenticeship Advisory Committee)

______Yes ______No

32a. On which committee(s)?

____

____

32b. Do you believe your organization should participate on apprenticeship advisory committees?

______Yes ______No

33. In general, are there any apprenticeships in your organization for which women would not be suitable?

______Yes ______No (TO COMMENTS)

33a. Which ones? ________________________

____

____

34. What is the beginning pay rate for apprentices in your organization?

$__________ per __________, or ____________________

35. What is the journeyman pay rate in apprenticeship positions?

$__________ per __________, or ____________________

Comments, if any. ________________________

____

____

____

____

Thank you for your cooperation.